

IMPERIAL INSTITUTE

MINERAL RESOURCES DEPARTMENT

MINING ROYALTIES & RENTS
IN THE
BRITISH EMPIRE

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IMPERIAL INSTITUTE

SOUTH KENSINGTON, S.W.7

THE Imperial Institute was established to promote the industrial utilization of the raw materials of the Empire

Intelligence—Special departments deal with enquiries relating to the sources, production, uses and marketing of raw materials, and with the collection and dissemination of general and statistical information on this subject

Investigations—The laboratories of the Institute are specially equipped for the chemical and technical examination of raw materials of all kinds with a view to determining their possible uses and value. Full reports are furnished on the composition, uses and value of materials submitted

Advisory Technical Committees—A number of Advisory Technical Committees consisting of authorities on the various groups of raw materials co operate in the work of the Imperial Institute, and a close touch is maintained with producers, users, merchants and brokers. Valuable help can thus be given to persons interested in the development of the resources of raw material throughout the British Empire

Public Exhibition Galleries—The galleries contain comprehensive collections illustrating the natural resources, industries, scenery and life of each country of the Empire overseas

Cinema—Films depicting the life, sports and industries of the various countries of the British Empire overseas are shown in the Cinema daily. Lectures on Empire industries and countries are frequently given

Empire Film Library—The Empire Film Library maintained by the Institute contains cinematograph films of Home production in industry and agriculture as well as the life and products of the overseas Empire. The films are available for loan to schools and other approved bodies in this country without other charge than the cost of their carriage both ways

Publications—Various publications are issued containing information of an authoritative character dealing with the various raw materials and the related industries. Details of the principal mineral publications are given on pages 184-5

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WEIGHT, CURRENCY AND AREA EQUIVALENTS

WEIGHT

Ton	= 2 240 lb unless otherwise stated
Maund (India)	= 40 seers = 82 lb
Pikul (Malaya)	= 133½ lb
Bhara (Malaya)	= 400 lb

CURRENCY

Approximate values, February 1936

ANGLO EGYPTIAN SUDAN

£1 = 100 piastres = 20s 6d

BRITISH GUIANA

\$1 = 100 cents = 4s 2d

BRITISH HONDURAS

\$1 = 100 cents = 4s

CANADA

\$1 = 100 cents = 4s

Ceylon

Rupce = 1s 6d

INDIA (BRITISH)

Rupce = 16 annas = 1s 6d

Anna = 12 pies = 1½d

INDIA (HYDRABAD DECCAN)

Hall: Sicca rupce = 1s 3½d

Hall: Sicca anna = 0 86d

KENYA UGANDA, TANGANYIKA

1s = 100 cents

MALAYA

\$1 = 100 cents = 2s 4d

PALESTINE

£1 = 100 piastres = 20s = 1,000 milhèmes

AREA

NEW GUINEA, S W AFRICA, PALESTINE

Hectare = 2 471 acres

UNION OF SOUTH AFRICA

Morgen = 2 117 acres

ANGLO EGYPTIAN SUDAN

I eddan = 1 038 acres

MINING ROYALTIES AND RENTS IN THE BRITISH EMPIRE

INTRODUCTION

As a result of the many inquiries received at various times by the Mineral Resources Department of the Imperial Institute for information with reference to mineral royalties, the Advisory Council on Minerals decided that a useful purpose would be served by collecting, in a form suitable for reference, all available details regarding the royalties, export duties and mining rents in force in the British Dominions Colonies and Dependencies, as well as in certain Mandated Territories and the Anglo Egyptian Sudan

Accordingly, a comprehensive questionnaire, prepared at the Imperial Institute, was circulated to Government Departments in British countries interested in mineral production, and to the Corresponding Members of the Institute. From the large amount of information thus obtained and that already available at the Institute, statements in the form given in Part I were compiled, and were in most cases subsequently submitted for approval and amendment when necessary to those who had replied to the questionnaire. In all, about seventy five officers of Overseas Government Departments rendered valuable assistance in this manner. Information regarding royalties payable on Great Britain was obtained mainly from mining companies and owners of royalty rights. In Part II the information as to royalties and export duties has been summarized and tabulated under certain mineral and metal groups

The subject-matter in Part I includes under each country (a) ownership, (b) amount of royalties and their assessment, (c) export duties, (d) rents under mining leases, (e) period and renewal of mining leases

(a) *Ownership* This subject has been dealt with briefly in an introductory statement to each country and an indication given where possible whether the ownership of mineral rights vests in the Government or in private persons

of the deductions allowable from the gross profits in order to arrive at the taxable portion. Charges which are in the nature of a tax on production such as a gold premium tax, have been included wherever possible. In dealing with most countries no reference has been made to quarry products, such as clay, granite, or roadstone, as the working of these is often not subject to Mining Ordinances or Regulations.

(c) *Export duties* In some countries, in addition to royalties, export duties are levied on minerals, while in others no royalty but only an export duty is operative. As such export duties constitute a charge on the industry, it is convenient to include them in this survey. An indication is also given of those cases where preference, in the form of lower export duties, is given to minerals intended for smelting in British countries. In order to economize space the heading "Export Duties" has been omitted except in those countries where such duties are levied.

(d) *Rents under mining leases* For reasons of economy, in the majority of cases only the dead rent (also termed minimum, fixed or certain rent) is quoted and no reference is made to the rates charged for surface rent, water rights or wayleaves. Information is also given where rent is merged into royalties. No reference is made to allowances for "short working" except in the sections devoted to the United Kingdom and British Guiana, as the replies to the Institute's questionnaire show that this concession is rarely made in the Dominions and Colonies.

(e) *Period and renewal of mining leases* In this section an endeavour has been made to state the length of the first term and of any subsequent renewals of the lease, and also to indicate whether a lessee who has complied with the covenants of his lease has the right to one or more renewals and, if so, upon what terms.

PRINCIPAL ROYALTY SYSTEMS

The following are the main divisions into which royalty systems may be divided:

(a) A fixed sum per ton or other unit of a particular mineral or metal, raised or sold from the mine.

(b) A percentage or a sliding scale based on the value of a particular mineral or metal.

(c) A tax on profits earned in respect of a particular mineral or metal, or by a particular mining undertaking.

Typical illustrations of each of the above three systems as applied to specific minerals are as follows:

Coal Southern Rhodesia (6d), Nova Scotia (12½ cents), New Brunswick (10 cents) and many other countries adopt system (a).

British India and Hyderabad Deccan each takes 5 per cent. of the sale value at the pit's mouth, thus illustrating (b) Manitoba, when the profits of the mine exceed \$10,000 per annum, levies a tax of 3 per cent upwards, thus illustrating (c) Victoria varies the royalty from $\frac{1}{4}$ d to 6d per ton, according to the thickness of the seam worked, and Queensland makes the rate dependent on the distance of the coal field from a seaport or place of delivery.

Diamonds present great diversity. Thus the Gold Coast levies 5 per cent on the net profits and an export duty of 6½ per cent *ad val* (b) and (c), the Union of South Africa has a profits tax of 3s in the £, plus an export duty of 10 per cent *ad val* on uncut precious stones (b) and (c), British Guiana levies a fixed sum of 50 cents per carat, plus an export duty of 35 per cent *ad val* (a) and (b), British India (in the case of mining leases only) takes 30 per cent of the profits on precious stones (c)

Gold usually pays 5 per cent *ad val* in the Gold Coast (b); 2½ to 7½ per cent *ad val* in Northern Rhodesia (b), Southern Rhodesia levies an *ad val* tax graduated according to the amount of gold recovered per ton of ore (b), a profits tax of 4s in the £ is levied in the Union of South Africa (c), 50 cents per oz, plus 1½ per cent *ad val* export duty, in British Guiana (a) and (b), 35 cents per oz in Nova Scotia (a), a tax of 3 per cent and upwards on annual profits exceeding \$10,000 in Ontario (c), and so forth Queensland and Western Australia impose no royalty on gold obtained under a gold mining lease, but if recovered under mineral leases or in Western Australia by sluicing or dredging, then they take 1 per cent of the value and 1s per fine oz respectively In Mysore a 5 per cent royalty on the value of the gold produced is levied only in those years when a net profit is made on the working of the mine, but in those years when the profits exceed £25,000 an additional tax of 5 per cent is levied on such excess

In a number of the above cases a gold-premium tax is levied in addition to royalty

Base metals present great variety Copper, in Southern Rhodesia, pays 3 per cent on the gross value, less refining, assaying and bank-handling charges (b), in the Union of South Africa, a profits tax of 2s 6d in the £ less certain allowances (c), in Northern Rhodesia, a

year (c)

Some Governments help and encourage the small scale operator by exempting small outputs of many minerals from royalties or by reducing the rate. In one case in the United Kingdom the lessor

of a lead ore deposit charges not more than one fourth of the stipulated royalty in years when no divisible profit is made

Mines in the Federated Malay States may obtain remission of the whole or part of the export duty on their mineral output if they can show that their ore is expensive to win refractory or of very low grade

Particular attention may be drawn to system (c) the substitution of a tax on profits of a mining undertaking for a royalty on output a method which has been adopted by various Empire governments notably Canada and the Union of South Africa In the case of the Union of South Africa it has not yet been possible to consolidate the mining law for the whole territory of the Union but in 1910 royalties in respect of mining by the public under State licence or lease were repealed in favour of a tax on profits present day procedure being prescribed in the Income Tax Act 1925 and its amendments In the Northern Territory of Australia South Australia and Newfoundland a profits tax is payable in respect of minerals not alienated from the Crown In certain of the Native States of India royalty may be taken at the option of the local Government either as a percentage of profits or of the value of the output

Countries which levy an export tax on certain minerals in addition to any royalty that may be payable include the Anglo Egyptian Sudan the Gold Coast Nigeria South West Africa the Union of South Africa British Guiana Trengganu New Guinea and New Zealand

It may be pointed out that as a royalty policy may operate as a differential advantage in favour of poorer mines and areas or may produce unintended economic consequences such as the retardation

Malay States and in Johore an extra duty is levied upon tin ore which is exported in order to be smelted in countries other than the United Kingdom Australia or the Straits Settlements In Nigeria an export duty of 50 per cent of the maximum royalty is levied on tin ore exported for smelting elsewhere than in the British Empire Similarly in Quebec the profits tax may be trebled in the case of ore minerals and mineral bearing substances transported outside the Province to be treated Again in British Guiana the royalty upon bauxite which is treated and used for manufacture within the Colony is reduced from 10 to 2 cents per ton Amongst other countries which may use export duties as a means of encouraging smelting within the Empire or some part of it may be mentioned Canada (Manitoba Quebec Saskatchewan) Nigeria British Honduras and Johore

This question of smelting and refining not only touches economic considerations, but has a peculiar importance from the point of view of Imperial defence. From that aspect we require not merely a supply of certain minerals but also the plant required for their treatment. Some countries impose a condition on mining leases or grants that ore raised must be treated and refined within that country or some larger unit of British territory—e.g., Ontario, Manitoba, Saskatchewan, Northwest Territories and Alberta may compel the treatment and refining of ore within the Dominion of Canada.

A perusal of this brochure will induce in many the reflection that the systems in force for the taxation of mineral production exhibit great variety in dealing with different local conditions. The policy adopted by a Government in determining its system of royalties is clearly a consideration of much importance for a bad mining law may retard a mining industry just as a good one may foster it and not the least important part of a mining law in point of economic effect is that which deals with royalties. Most Governmental decisions on royalty policy involve the reconciliation of a number of competing considerations. In the first place an administrator wishes to conserve the mineral resources of his country, a valuable national asset incapable of being renewed. Secondly he wants to raise revenue from its minerals but is aware that mining enterprises are highly speculative and that the investing public is entitled to expect a substantial share of the profit derived from the enterprise in the event of its being successful. Thirdly he realizes that mineral products are essential to many other industries and that a prosperous mining industry by reason of the population and the other industries which it attracts will be a powerful factor in the general development of the country. He will therefore resist the temptation to fix royalties too high because in so doing he will retard and may even defer for many years the development not merely of a mining industry but of other industries and sources of employment. At the same time he will take care that the certain payments stipulated in the mining leases are adequate to secure that the property shall be developed and not merely taken in lease to prevent development. By balancing these and many other factors a Government will ultimately evolve the mining policy which is best suited to its own conditions.

reference should be made to Halsbury, "Laws of England, vol xx Mines, Minerals and Quarries," but the following summary in regard to the Forest of Dean and Derbyshire may be of interest

The working of coal and ironstone in the Forest of Dean district is regulated by the Dean Forest Mines Act, 1838. The minerals are virtually the property of "free miners," who must be born in the Hundred of St Briavels and have worked for a year and a day in a mine in the Forest, they have the right of priority of application to the grant of 'gales,' or areas of minerals for the purpose of mining, not exceeding three in number. Gales vary in size from less than 100 acres in shallow workings to 2,000 acres in the deepest. A gale becomes the property of the galee in perpetuity, subject to a payment to the Crown and to observance of the rules and regulations contained in the Act of 1838. This payment is claimed in consideration of an ancient right possessed by the Crown to "put in a fifth man" to work for the profit of the Crown after a mine is opened. The free miner has the right to refer the question of the amount of this payment to arbitration. It is fixed for periods of twenty one years, at the end of which it is open to revision by the Crown, subject to arbitration if the free miner or other person interested objects to the proposed revisions. In the case of certain of the deeper areas the period of revision has been extended to sixty three years. Free miners for the most part sell their rights, which are usually acquired by companies by whom minerals are worked.

In Derbyshire the mining customs of the "King's Field" are unusual. Anyone has the right of prospecting and mining without paying any compensation to the surface owner, but subject to the control of the Barmaster and payment of a royalty to the Duchy of Lancaster.

Amount of Royalties and their Assessment

As stated above, only a small part of the minerals belongs to the Crown, so that usually the amounts to be paid as royalties, dead or certain rents, and the conditions of the lease, depend upon negotiations between the owners of the minerals and those who desire to work them.

The statements given below have been compiled from information available in the Reports of the Royal Commission on the Royalties of 1889-1893 and on the Coal Royalties of 1925, and from particulars furnished by numerous mining companies.

The method adopted for charging royalties (in Scotland termed "lordship") may be one or other of the following

- 1 A fixed royalty per ton
- 2 A fixed sum per acre
- 3 A fixed sum per ft thickness of seam per acre

- 4 A sliding scale in which the price per ton or per acre is above and below a datum figure according as the average selling price of the mineral or metal rises or falls
- 5 A fixed minimum royalty per ton, together with a sliding scale varying with the average selling price of the mineral.

Coal Practically all inland coal belongs to private individuals, registered companies, and charitable corporations such as colleges and the Ecclesiastical Commissioners

The Royal Commission on Mining Royalties, 1893, estimated the average royalty if converted into a tonnage rate upon vendible coal (i.e., the amount after deduction of that required for colliery use) raised in the United Kingdom in the year 1889 to be 5 11d. per ton inclusive of wayleaves, which means that the actual royalty was about 5½d per ton. Rates for individual collieries varied between 2½d and 15d per ton, the latter being exceptional. The Ecclesiastical Commissioners

the quality of the coal and other essential factors) and that the average was between 4d and 5d per ton

In 1919, the Ecclesiastical Commissioners, in evidence before the Royal Commission on the Coal Mining Industry (Sankey Commission), estimated the average royalty on coal then received by them to be 6d. per ton

In 1926, which was the last occasion on which comprehensive information as to coal royalties in Great Britain became available, another Royal Commission on the Coal Industry reported. It appears from information given in Appendix No. 1 to vol. iii. of its Report that the yearly average of royalties during the years 1889 to 1917 ranged from 5 40d to 5 88d per ton of coal raised. From 1918 to 1922 the range was from about 6 24d to 7 92d. The yearly average royalty for the years 1923 to 1925 was about 5 70d. per ton. Since 1925 the average rate of royalty has declined to 5 43d per ton raised in 1934. Hence there is little difference between the rate of the average royalty paid today and that in force fifty years ago

An analysis of the rates per ton paid for royalties, wayleaves, etc., during 1925 is given in Appendix 18 to the Report and shows for each of the several districts the rates of royalty chargeable (varying from under 3d. to 1s. and over), together with the amounts of coal subject to these royalties in each case

In addition to a levy of ½d per ton of the output of coal under

for providing pit-head baths at coal-mines.

Oil shale Royalties range from 3d to 9d per ton, 4d to 5d being probably an average rate

Petroleum and natural gas According to the Petroleum (Production) Act, 1934 (see p 12), the right to both of these products (except in Northern Ireland) is vested in the Crown, which has power to levy royalties Under the Petroleum (Production) Regulations 1935, a minimum royalty of 3s per ton and a maximum of 6s per ton of petroleum is prescribed

Gold and silver These 'royal metals' belong to the Crown and the royalty usually charged is

(a) When the Crown owns all the minerals worked from the same lease, one twenty fifth of the value of the gold and silver when raised

(b) When the other minerals worked from the same lease belong to other persons, one fiftieth of the value of the gold and silver

Tin ore Royalty is frequently levied on the dressed ore as delivered to the smelters and varies from one twentieth to one fortieth of the selling price, a usual rate being one thirtieth In some cases, however, the royalty is one fifteenth to one twentieth of the divisible profits resulting from the sale of the ore In the case of the re starting of an old mine, the royalty may be one twentieth of the selling price for ore recovered above water level the rate falling to one thirtieth when pumping is started

Copper ore Only small quantities of copper ore are mined, the royalties varying from one thirtieth to one twentieth of the selling price of the dressed ore

Iron ore (red hematite) The rate levied may be 7 to 12½ per cent (according to the grade of ore) of the selling price at the mine, or may depend on a sliding scale based on the amount realized per ton of ore, for instance, at one mine ore selling at 12s or more per ton at the mine pays a royalty of 1s 6d per ton plus one sixth of the amount by which the price realized exceeds 12s per ton Recently, there has been a tendency to reduce the rate of royalty on iron ore in certain districts

Jurassic ironstone (including Oolitic and Liassic ironstones of Lincolnshire, Northamptonshire and Oxfordshire) Royalty is usually levied on a tonnage basis for either the raw or the calcined ore, the "ton" being 21 to 23½ cwt Rates, which are influenced by the quality of the ore, vary from about 2d to 6½d per ton of raw ore and from 3½d to 1s per ton of calcined ore

Clay ironstone Rates usually vary from 2d to 6d per ton of ore and average about 4d, but occasionally as much as 9d per ton may be levied In the case of at least one lease, which comprises iron

stone, limestone building and other stone, the royalty in respect of the latter group is one half that payable in respect of ironstone.

Lead ore Royalty is levied under at least three different systems. It may be

- (a) A fixed sum per ton of concentrate
- (b) A rate depending on the selling price of the ore at the mine, with no sliding scale
- (c) A rate depending on the selling price of the ore at the mine, with a sliding scale operating in accordance with the market price ruling for metallic lead or galena

Rates quoted to the Institute show wide fluctuations in each system. Thus those based on (c) for a selling price of £10 per ton of ore range from about one-eighth to one twentieth, while rates under (b) vary between one eighteenth and one forty-fifth the rates increasing in each case with a rise in the price realized per ton of ore. When the royalty takes the form of a fixed sum, as under (a), the amounts at different mines vary from 10s to 20s per ton.

Zinc ore As in the case of lead ore, the royalty is frequently based on the market price of the metal. Thus, one lease provides for a royalty of 6d per ton of ore when spelter is quoted at £15 or less per ton, the rate rising by stages to 3s per ton when spelter is at £25 per ton. In another lease the rate starts at 1s 2d per ton and rises to 5s per ton when spelter is quoted at £28 to £30 per ton. In a third instance the royalty is one thirty fifth of the selling price of the ore at the mine, subject to an abatement of 10 per cent for each £1 fall in the price of zinc blende below £10 per ton, with a proviso that when no divisible profits are earned the royalty payable shall not exceed one fourth of the rate.

Barytes Royalties, which depend to some extent upon the quality of the barytes obtainable, are usually levied upon the tonnage cleaned and sold, and vary from 9d to 2s 6d per ton, with an average of about 1s.

Barium carbonate (witherite) Information supplied to the Institute indicates that rates from 2s to 2s 6d per ton of ore are in operation.

China clay (kaolin) Royalty is usually levied on the tonnage despatched from the works, the rate varying between 1s and 2s 6d per ton according to the quality of clay yielded by the deposit. Exceptionally, a royalty of as much as 4s per ton may be provided for in the lease. Formerly, royalty was in some cases calculated on the selling price of the clay, but recently a fixed rate per ton has been more general. Occasionally, the rate of royalty is reduced when the quantity of clay shipped exceeds a certain tonnage. "Mica clay" usually pays a royalty of 6d per ton, but, exceptionally, 2s per ton may be payable.

Clay (brickmaking) Royalty is usually levied on the number of bricks produced, ranging from 1s to 2s per 1,000. Rates lower than 1s are sometimes quoted for that part of the output which exceeds an agreed amount—say 2,000,000 bricks per annum. When royalty is charged on the raw clay excavated a charge of 6d to 9d per cu yd (about $1\frac{1}{2}$ tons) or 3d to 4d per ton of $22\frac{1}{2}$ cwt is often made.

Clay (cement making) On clay used in the manufacture of Portland cement the royalty varies from less than 1d to about 3d per ton of clay produced and used.

Clay (tile) As in the case of clay used for brickmaking, royalty is levied either at the rate of about 1s to 1s 3d per 1,000 tiles or about 1s per ton ($22\frac{1}{2}$ cwt) of clay used or sold. Some quarries pay an additional percentage on the royalty to cover waste.

Fireclay The refractory properties of the clay probably influence the rate of royalty and clay of special quality may pay 8d to 10d per ton but there are many examples in which only 3d per ton ($22\frac{1}{2}$ cwt) is levied.

Fluorspar The rate varies from 1s to 1s 9d per ton of dressed mineral sold.

Ganister As in the case of other refractory materials royalties show a wide range. The information given to the Institute by companies mining the material showed from 5d to 2s per ton, an average rate would perhaps be about 10d.

Granite and roadstone For consideration in regard to royalties, these can be divided into (1) roadstone (2) dressed blocks including setts, channels and kerbs. The rate for roadstone (including granite, "whinstone," limestone and dolomite) commonly ranges between 1½d and 4d per ton. In certain leases the rate is graduated according to the annual output, starting at say 4d per ton for the first 20,000 tons and scaling downwards to 2d per ton on that part of the output which exceeds 40,000 tons. For dressed granite blocks including setts and kerbs the rate often varies from 6d to 1s per ton, but instances have been brought to the notice of the Institute in which a lower rate is being paid on granite setts.

Gypsum Royalties vary from 1d to 1s 3d per ton according to quality, an average would probably be about 9d per ton.

Limestone and chalk On limestone or chalk used for the manufacture of Portland cement the rates usually range between 1½d and 4d per ton. Certain limestone deposits used for making Portland cement pay 5d or 6d per ton of finished cement sold, which is equivalent to 3½d to 1½d per ton of limestone used. In some cases a royalty is levied on the output of limestone or chalk plus an additional royalty of say 3d per ton of lime or cement made therefrom. In some cases the royalty is levied on the quantity of stone quarried while other leases provide for a levy on the amount sold.

Limestone blocks for building The basis on which royalty is levied varies considerably even in the same locality. Thus the rate may be between 3s 6d and 5s 6d per sq yd of deposit cleared, or 2s per ton or 1d per cu ft of squared marbleable stone sold.

Salt Rates vary from 3d to 8d per ton of salt or an amount of brine estimated to yield that quantity. The royalty in some cases includes a levy to cover surface damage. Other leases specify a royalty of 5 per cent of the value of the salt produced.

Sandstone For building purposes sandstone blocks usually pay from ½d to 1d per cu ft. Sandstone rubble pays 3d to 4d per ton.

Slate Royalty is often levied according to the grade of the marketable product obtained somewhat on the following basis. Best slates 3s per ton, seconds 2s per ton, thirds and 'peggies' 1s per ton. In another case a single rate of say 2s 6d per ton on slates and slabs of all sizes is levied. A common royalty is from one twentieth to one fortieth of the selling price of the slates at the mine.

MINERAL RIGHTS DUTY

Under Section 20 of the Finance (1909-10) Act 1910 as amended from time to time a duty of 1s for every 20s is levied on the net rental value of all rights to work minerals and of all mineral way leaves. Common clay, common brick clay, common brick earth, sand, chalk, limestone and gravel are excluded from this duty.

Rents under Mining Leases

Usually the lease provides for an annual rent (often termed fixed minimum, certain or dead rent) which merges into royalty—e.g., if the rent were £500 per annum and the royalty 6d per ton, the dead rent would merge into the royalty for any quantity of mineral exceeding 20,000 tons per annum; if less mineral than this amount were mined during the year, the rent of £500 would nevertheless be payable, but no royalty.

A variety of factors may be taken into consideration in fixing a dead rent, such as the acreage of deposit to be worked and the rate of royalty to be charged.

Short Working Coal mining leases in the United Kingdom usually contain provision for what is known as "short working" in contradistinction to 'overs'. This concession is also made, but not so generally, in other mineral leases. When the amount payable for

3, 5, 7, or 10 years being common, any 'shorts' remaining unre-

couped at the end of the stipulated period being cancelled. In some leases, however, the lessee is allowed to recoup himself in any subsequent year, and there is a tendency to extend for the full term of the lease the period during which shorts may be recouped. Shorts are in some cases carried forward when the lease is renewed.

Coal The dead rent usually ranges from £1 to £2 per acre of surface area, although in exceptional cases it may reach £5. Short workings are usually recoupable.

Ironstone In the case of hæmatite iron ore the certain rents vary from about £2 to about £10 per acre, in the case of bedded ironstones, from 8s to £1 per acre. Provision for the recovery of "shorts" is almost universal in ironstone leases, and according to the modern practice they are recoverable during the full term of the lease.

Lead and zinc ores Dead rent may be levied on the acreage of deposit worked or on the estimated yield in royalty on the basis of tonnage output. During recent years the amount of dead rent has been considerably reduced in many cases. The average is about 2s to 7s per acre. Short workings are usually recoupable.

Oil shale Usually dead rent merges into royalties and short working is recoupable over the whole term of the lease.

Petroleum There is power under the Petroleum (Production) Regulations 1935, to charge minimum annual payments to be calculated upon the basis of the size of the licensed area. These payments merge into royalties.

Tin ore Dead rents are as a rule not based solely on the surface area, but may depend on the method adopted for the calculation of royalties. An average rate is about 2s to 7s per acre.

Provision is not always made in the lease for short working, and when it is the period of recoupment of shorts is usually limited to 3 or 5 years.

Copper ore A dead rent of 2s to 7s per acre is about the average.

Granite and roadstone The size of the quarry and the quality of the stone yielded are important factors in determining the amount of the dead rent, which varies from about 5s to about £2 per acre. Rent usually merges into royalties and "shorts" are often recoupable.

Limestone Short workings are often recoupable over 5 or 7-year periods.

Period and Renewal of Mining Leases

It is not general for mining leases in the United Kingdom to give the lessee the right to a renewal on the expiration of the term for which the lease was granted, but it is believed that in practice difficulty is rarely met with in obtaining a renewal. The extension by

the Settled Land Act, 1925, of the period for which a tenant for life can grant a mining lease from 60 to 100 years has already removed many of the difficulties which have arisen in the past

In the case of a number of minerals such as coal, fluorspar, barytes, oil shale, and ores of iron, copper, lead, tin, zinc and tungsten, it would appear that the combined effect of the Mines (Working Facilities and Support) Act, 1923, Section 13 of the Mining Industry Act, 1926, and the Mines (Working Facilities) Act, 1934, is to enable a lessee who meets with a refusal to renew his lease, or at any rate a refusal to renew it upon reasonable terms, to apply to the Railway and Canal Commission for a compulsory renewal upon terms to be decided by the Commission, on the ground that it is in the national interest that a renewal should be granted

In certain cases the length of the lease is calculated so that the deposit will be exhausted by the time the lease expires

Coal From the Report of the Royal Commission on Mining Royalties (1893) it appears that in England and Wales the length of coal mining leases usually varied from 21 to 60 years, but in some cases extended to 99 years while certain small collieries were let on annual tenancies. The term varied according to the leasing power of the lessor, the extent of the property embraced, and the number of seams let. In Scotland leases were usually shorter, varying from 20 to 31 years. Since the issue of the above mentioned report there has been a tendency for the terms of coal leases to be made longer. This is believed to be the case, particularly in regard to settled estates, since the Settled Land Act of 1925 became operative

The tabular statement on page 22 (kindly supplied by the Mines Department) based on Table XVIII of Appendix 18 of vol. III of the Report of the 1925 Royal Commission, indicates the amount of coal obtained in 1925 from leases of varying lengths. The information relates to 1,189 mines in the United Kingdom

Petroleum Mining leases may be granted by the Board of Trade for a term not exceeding 50 years, with a right to the lessee of one renewal for a further period of 25 years

Tin, lead, zinc and iron ores The term of leases to mine these ores varies from 20 to 60 years, the longer periods being now favoured. A right of the lessee to one or more renewals is occasionally included in the lease, but this practice is not general

Barytes The term of the lease varies from 21 to 42 years, in some cases leases carry the right to a renewal on the same terms

China clay A term of 60 years is not uncommon, but the examples quoted to the Institute range from 21 to 90 years

Clay (for brick, tile, pottery or cement making) The term ranges from 10 up to 99 years. In some cases the lease may be terminated by the lessee when the deposit is exhausted

Coal Raised during 1925

<i>Leases Expiring on or before 31st December of Year Given</i>	<i>Output in 1925 by Leases (1,000 Tons)</i>	<i>Percentage of Total Output</i>
1926	2,629	1 3
1927	1,993	1 0
1928	1,536	0 8
1929	980	0 5
1930	1,811	0 9
1931	1,555	0 8
1932	2,101	1 1
1933	1,960	1 0
1934	2,792	1 4
1935	1,707	0 9
1940	17 938	9 0
1950	34,646	17 4
1960	40 155	20 2
1976	49 437	24 9
After 31st December, 1976	28,953	14 6
Annual tenancies	128	0 0
Freehold	8 369	4 2
Total	198,690	100 0

Fireclay Where the deposit is worked essentially for fireclay, the term of the lease ranges from 21 to 40 years 31 years being perhaps an average period where the fireclay is worked with coal, longer terms up to 100 years are more general

Granite Many leases are in force ranging from 14 to 90 years, an average period would probably be about 40 years

Gypsum Periods range from 35 to 60 years

Slate Periods range from 14 to 50 years

IRISH FREE STATE*

Leases of the following minerals and mining rights are issued by the Minister for Industry and Commerce under the authority of the Mines and Minerals Act, 1931

(1) All mineral substances (except stone, gravel, sand or clay) and mining rights reserved to the State upon sales under the Land Purchase Acts, 1903 and 1923

(2) Mines of gold and silver (mines royal)

(3) Minerals and mining rights which passed to the State by the operation of Article 11 of the Constitution

* Thanks are due to the High Commissioner of the Irish Free State in London, who kindly supplied the information from which this statement was compiled

Amount of Royalties and their Assessment

There is no fixed scale of royalties for State mining leases. The Mines and Minerals Act, 1931, authorizes the Ministers for Industry and Commerce and for Finance to determine, by agreement with the lessees, the royalties to be paid. The following are examples of recent royalties so fixed:

<i>Coal..</i>	<i>..</i>	<i>.</i>	<i>..</i>	<i>..</i>	3d. per ton.
<i>Iron ore</i>	<i>..</i>	<i>..</i>	<i>.</i>	<i>..</i>	2d. per ton.
<i>Copper ore</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>..</i>	2 per cent. <i>ad val.</i>
<i>Gold and silver</i>	<i>..</i>	<i>..</i>	<i>..</i>	<i>..</i>	4 per cent. <i>ad val.</i>

Rents under Mining Leases

The dead rents payable in respect of State mining leases are agreed with lessees by the Minister for Industry and Commerce and the Minister for Finance. They normally range between £5 and £20 per annum and are not based solely on area.

It is provided that if the amount payable as royalty during any one year exceeds the amount paid as dead rent on the mining lease for that year, the dead rent so paid may be deducted from the sum payable as royalty. If in any year the royalty amounts to less than the dead rent, no royalty is payable. Each year is treated separately, there being no carry-over from one year to another.

Period and Renewal of Mining Leases

The maximum period for which a State mining lease may be granted is 99 years, and such lease is not renewable by the terms thereof.

The terms and conditions of leases of non-State mines and minerals are settled by private agreement. The Mines and Minerals Act, 1931, however, confers power on the Minister for Industry and Commerce to grant mining and ancillary rights to persons who, in certain circumstances and for some one or other of the reasons set out in the Act, are unable to negotiate leases of such mining rights by private agreement. In such cases the Minister is also authorized to fix the terms and conditions on which the rights are to be exercised.

AFRICA

ANGLO-EGYPTIAN SUDAN*†

THE only mining legislation in force in the Sudan is the Mining (Prospecting Licence) Ordinance, 1899, which, as amended by the Revision Ordinance, 1906 merely prohibits prospecting for metals, minerals mineral substances or precious stones without a prospecting licence from the Governor General. The ownership of all such metals, minerals etc. is therefore vested in the Government.

Amount of Royalties and their Assessment

Gold metals or minerals A lessee of land for mining purposes pays to Government in respect of all metals and minerals won (other than precious or semi precious stones) a royalty of 2 per cent of their value at the average market price upon the London market.

Where the London market price cannot be ascertained, the royalty levied is 2 per cent of the actual price obtained by the lessee on sale.

All such royalty is paid in respect of periods of six calendar months, from January 1st and July 1st in each year and within one calendar month of the expiration of each period. The market price of each metal or mineral upon the London market is taken from trade journals of repute as near as may be to January 1st April 1st July 1st and October 1st in each year and the average price of each metal or mineral for each period of six months is deemed to be the average of the price at the beginning the price at the middle, and the price at the end of such period.

Precious and semi precious stones 10 per cent of the sale price.

Salt 1s 10½d to 4s 2d per metric ton (2,204 lb.)

If the amount of royalty calculated as above in any year in any of the above cases is equal to or less than the rent of the land, no royalty is payable in respect of that year, and if it exceeds the said rent only the excess of the royalty so calculated over the rent is demanded as royalty in respect of that year.

When any trader liable to business profits tax has in any one year paid a royalty under a mining lease, the amount of the royalty is treated as having been paid on account of the business profits tax payable for the year.

* The Anglo Egyptian Sudan is administered under a condominium by Great Britain and Egypt.

† Thanks are due to the Director, Department of Economics and Trade, for kindly furnishing the information from which this statement was compiled.

Export Duties

Gold and silver bullion are exempt from export duty, but salt and other mineral are liable to a normal duty of 1 per cent *ad val* in addition to royalties.

Rents under Mining Leases

A fixed yearly dead rent is payable at the rate of £1 (Egyptian) per feddan (1 035 acres) except in the case of coal lands, for which the rent is at the rate of 12 piastres per feddan.

Period and Renewal of Mining Leases

Leases are granted for a period of 30 years and are renewable for one further period of 10 years subject to the same rents conditions and provisions.

BECHUANALAND PROTECTORATE*

Lands in the Bechuanaland Protectorate may be considered under three headings (1) Crown lands (2) Native reserves, (3) Private lands.

In Crown lands the minerals are vested in the Crown. The minerals in Native reserves are vested in the respective chiefs and tribes but no concession or grant made by any native chief will be recognized unless and until it has been approved by the Secretary of State.

In Private lands minerals are vested in the registered holder of the mineral rights but where the local Mining Proclamation has been applied to such land prospecting and mining may only be carried on under the provisions of that proclamation.

In the Tati District mineral rights are vested in the Tati Co. Ltd. Details regarding the royalties and rents imposed under licences issued by Tati Co. are given below after the data relating to the remainder of the Bechuanaland Protectorate.

Amount of Royalties and their Assessment

Coal 3d per short ton (2 000 lb.)

Copper If the average cash price of electrolytic copper in London for the month following the date of the copper production is less than £55 per ton 2 per cent less 0 10 per cent for every £1 that such price is below £55.

* Thanks are due to the Acting Government Secretary and Registrar of Deeds Bechuanaland for kindly furnishing the information from which this statement was compiled (excluding that relating to the Tati District).

If such a price is between £55 and £65, 2 per cent plus 0 05 per cent for every £1 above £55

If such price is between £65 and £75, $2\frac{1}{2}$ per cent plus 0 10 per cent for every £1 above £65

If such price is over £75, $3\frac{1}{2}$ per cent plus 0 15 per cent for every £1 above £75

Lead If the average cash price of lead in London for the month following the date of the lead production is less than £20 per ton, 2 per cent less 0 10 per cent for every £1 below £20

If such price is over £20, 2 per cent plus 0 20 per cent for every £1 above £20

Zinc 0 10 per cent for every £1 of the average cash price per ton in London for the month following the date of the zinc production

Gold (a) 2 per cent of the value of the monthly output plus 0 2 per cent for every dwt of fine gold recovered per ton (2 000 lb) of ore treated

(b) If the value of the output is less than £3 200 per month, the royalty payable under (a) shall be diminished by 1 per cent of its total for every £30 below £3,200

Example If the value of the monthly output of (say) 2,000 tons of ore containing 6 1 dwt of recoverable gold per ton is £2,560 the royalty under (a) is £82 8s 7d (i.e., $2+0\ 2\times 6\ 1$), or 3 22 per cent of £2 560 Under (b) this royalty is diminished by $21\frac{1}{2}$ per cent (i.e., $\frac{3,200-2\ 560}{30}$) giving a net royalty payable of £64 16s 11d

Gold Premium Tax A tax of 15 per cent of the gold premium (i.e., the difference between the current market rate and 85s per fine oz) is levied on the taxable amount of the output from all gold mines in Bechuanaland, including the Tati district

The taxable amount per month is calculated as follows

(i) If the output exceeds 600 oz the whole is taxable

(ii) If the output exceeds 300 oz but not 600 oz, the taxable amount shall be twice the number of ounces by which the output exceeds 300 oz For the purpose of calculating the tax on such amount the average current market rate of the total output shall be deemed to be the current market rate of the taxable amount

(iii) If the total output does not exceed 300 oz no tax shall be payable

Silver 3 per cent *ad val*

Diamonds On all diamonds won and sold, whether from alluvial or from a pipe, a royalty of 10 per cent of the value is payable to the Government

The Government is also entitled to one half of the annual profit realized from the working of any diamond pipe. Realized profit is the excess of revenue from the sale of diamonds over expenditure, including capital expenditure incurred in working the pipe and in the production and realization of the diamonds. If there is a loss in any one year, it is carried forward as an addition to expenditure in the following year.

Other minerals * 3 per cent

The royalties payable for minerals won on private lands are the same as those chargeable for mining on Crown lands, but they are payable to the holders of the mineral rights.

The percentage of royalties is calculated on the gross market value of the mineral or mineral product less brokerage and returning or reduction charges. The term "gross market value" is defined as being the gross price which the grantees would have received for the product as the result of a *bona fide* sale at market value by delivering the product to the purchaser at the point of sale without any allowance for transport to the point of sale, selling commission, insurance, cost of realization or otherwise.

TATI DISTRICT

Royalties payable to the Tati Co. Ltd. in regard to mining in this District are as follows:

Coal 6d per ton (2 000 lb.) raised, excluding coal used on the location for the purpose of working the same for coal.

Gold (from reef claims) If the total value of minerals won from any gold reef claims in any month—

- (1) Does not exceed £200 no royalty is levied
- (2) Exceeds £200 but not £3,000, $2\frac{1}{2}$ per cent of the total value
- (3) Exceeds £3 000 and is the product of ore yielding not more than 1 oz. of gold per ton 5 per cent of the total value
- (4) Exceeds £3 000 and is the product of ore yielding more than 1 oz. of gold per ton $7\frac{1}{2}$ per cent of the total value
- (5) While exceeding £3 000 is the product of not less than 1 000 tons of ore yielding a value not greater than 22s. worth of minerals per ton, $3\frac{1}{2}$ per cent of the total value
- (6) Is the product of not less than 10,000 tons of ore yielding a value not greater than 16s. worth of minerals per ton, $2\frac{1}{2}$ per cent of the total value

Alluvial claims pay $2\frac{1}{2}$ per cent of the value of the minerals won

* *Urges* does not include oil shale, mineral oil, limestone, building or road making stone, sand, clay, gravel, salt or other substances used for pastoral or agricultural purposes.

If such a price is between £55 and £65, 2 per cent plus 0.05 per cent for every £1 above £55

If such price is between £65 and £75, $2\frac{1}{2}$ per cent plus 0.10 per cent for every £1 above £65

If such price is over £75, $3\frac{1}{2}$ per cent plus 0.15 per cent for every £1 above £75

Lead If the average cash price of lead in London for the month following the date of the lead production is less than £20 per ton, 2 per cent less 0.10 per cent for every £1 below £20

If such price is over £20, 2 per cent plus 0.20 per cent for every £1 above £20

Zinc 0.10 per cent for every £1 of the average cash price per ton in London for the month following the date of the zinc production

Gold (a) 2 per cent of the value of the monthly output plus 0.2 per cent for every dwt of fine gold recovered per ton (2,000 lb) of ore treated

(b) If the value of the output is less than £3,200 per month, the royalty payable under (a) shall be diminished by 1 per cent of its total for every £30 below £3,200

Example If the value of the monthly output of (say) 2,000 tons of ore containing 6 l dwt of recoverable gold per ton is £2,560 the royalty under (a) is £82 8s 7d (i.e., $2 + 0.2 \times 61$), or 3.22 per cent of £2,560. Under (b) this royalty is diminished by $21\frac{1}{3}$ per cent (i.e., $\frac{3,200 - 2,560}{30}$), giving a net royalty payable of £64 16s 11d

Gold Premium Tax A tax of 15 per cent of the gold premium (i.e. the difference between the current market rate and 85s per fine oz) is levied on the taxable amount of the output from all gold mines in Bechuanaland including the Tati district

The taxable amount per month is calculated as follows

(i) If the output exceeds 600 oz the whole is taxable

(ii) If the output exceeds 300 oz but not 600 oz, the taxable amount shall be twice the number of ounces by which the output exceeds 300 oz. For the purpose of calculating the tax on such amount the average current market rate of the total output shall be deemed to be the current market rate of the taxable amount

(iii) If the total output does not exceed 300 oz no tax shall be payable

Silver 3 per cent *ad val*

Diamonds On all diamonds won and sold, whether from alluvial or from a pipe, a royalty of 10 per cent of the value is payable to the Government

The Government is also entitled to one half of the annual profit realized from the working of any diamond pipe. Realized profit is the excess of revenue from the sale of diamonds over expenditure, including capital expenditure incurred in working the pipe and in the production and realization of the diamonds. If there is a loss in any one year it is carried forward as an addition to expenditure in the following year.

Other minerals * 3 per cent

The royalties payable for minerals won on private lands are the same as those chargeable for mining on Crown lands, but they are payable to the holders of the mineral rights.

The percentage of royalties is calculated on the gross market value of the mineral or mineral product less brokerage and returning or reduction charges. The term 'gross market value' is defined as being the gross price which the grantees would have received for the product as the result of a *bona fide* sale at market value by delivering the product to the purchaser at the point of sale without any allowance for transport to the point of sale, selling commission, insurance, cost of realization or otherwise.

TATI DISTRICT

Royalties payable to the Tati Co. Ltd. in regard to mining in this District are as follows:

Coal 6d. per ton (2 000 lb.) raised, excluding coal used on the location for the purpose of working the same for coal.

Gold (from reef claims). If the total value of minerals won from any gold reef claims in any month—

(1) Does not exceed £200 no royalty is levied.

(2) Exceeds £200 but not £3 000, $2\frac{1}{2}$ per cent of the total value.

(3) Exceeds £3 000 and is the product of ore yielding not more than 1 oz. of gold per ton, 5 per cent of the total value.

(4) Exceeds £3 000 and is the product of ore yielding more than 1 oz. of gold per ton, $7\frac{1}{2}$ per cent of the total value.

(5) While exceeding £3 000 is the product of not less than 1 000 tons of ore yielding a value not greater than 22s. worth of minerals per ton, $3\frac{1}{2}$ per cent of the total value.

(6) Is the product of not less than 10 000 tons of ore yielding a value not greater than 16s. worth of minerals per ton, $2\frac{1}{2}$ per cent of the total value.

Alluvial claims pay $2\frac{1}{2}$ per cent of the value of the minerals won.

- * *Minerals* does not include oil shale, mineral oil, limestone, building or road making stone, sand, clay, gravel, salt, or other substances used for pastoral or agricultural purposes.

Base metals Minerals obtained from reef claims pay the same royalty as gold, but if obtained from locations other than reef claims, they pay such royalty as may be determined by the Resident General Manager of the Company

Tailings or other residues (from ore already treated upon which royalty has been paid) Minerals recovered from such tailings pay royalty on the same basis as if they were the product of ore treated in provisions (2), (3), (4), (5) and (6) set forth above under "Gold," but no abatement under provision (2) is allowed

Rents under Mining Leases

Licence fees payable on claims (excluding those for diamonds) are at the following rates per claim of 60,000 sq ft For the first year after the date of issue 1d per month for the second third and fourth years, 1s per month, for the fifth and every succeeding year, 5s per month

Claim licence fees are refunded to the holder of the licences by the Mining Commissioner if the holder applies for such refund and proves to the satisfaction of the Mining Commissioner that he has spent, during the period in respect of which a refund is claimed, at least 10s per month per claim in wages on work upon the claims, including an allowance of £30 per month for his own work if he is personally engaged thereon

Diamonds The licence fees for diamond claims are as follows

Alluvial claims, 3s per claim per month

Pipe claims 5s per month for each 900 sq ft of pipe area

The area of the pipe is determined by the Mining Commissioner

On all mineral concessions granted by the Chief and Tribe of a Native Reserve and approved by the Secretary of State a rent of 1s per sq mile of the area held under the concession is payable to the Crown

TATI DISTRICT

The rents levied by the Tati Co are as follows

Coal claims 6d per acre per month

Reef claims From the date of the issue of a certificate of registration the following licence moneys are payable

(a) Until working for a profit commences For each of the first six months from the date of registration, 2s 6d per claim or fraction of a claim per month, or, in lieu thereof, 30 ft of such development work as shall be prescribed by the Company for each block of 10 claims pegged For the next 12 months, 7s per claim or fraction of a claim per month and thereafter 10s per claim, or fraction of a claim per month

(b) From such date as working for a profit has commenced Claim licence money of 10s per claim or fraction of a claim per

month. When the monthly output from any block of claims does not exceed £100 in value the rate is 5s per claim or fraction of a claim per month provided that if no minerals are won from a block in any month claim licences are payable at the rate of 10s for such month in respect of each claim in such block unless the claimholder shall on or before the last day of such month apply for a reduction to the Resident General Manager and shall satisfy him that the failure to produce is due to temporary and involuntary causes in which events the Resident General Manager may reduce the monthly licence money to 5s per claim in respect of such block.

Alluvial claims Licence money of 5s per calendar month per claim.

The first discoverer of any payable deposit of base metal if such deposit does not lie within a radius of 10 miles of any previous discovery has the right to peg off and work a block not exceeding 600 ft on the strike and 1 500 ft on the dip free of all claim licences on payment to the Company of a royalty of 2½ per cent of the gross yield provided that he works same reasonably continuously.

Period and Renewal of Mining Leases

Where licence fees are more than three months in arrear the title thereto lapses but such lapsing does not apply to specially registered claims which lapse only when such fees are twelve months in arrear and remain unpaid after a further six months notice to pay shall have been given.

GOLD COAST

GOLD COAST COLONY*

In the Gold Coast Colony the mineral rights are in the hands of the native owners of the land.

Amount of Royalties and their Assessment

A royalty of 5 per cent of the net profits is payable to the Government, except that the Ashanti Goldfields Corporation, Ltd, pays a royalty of 5 per cent of the value of gold won by them.

Export Duties

An export duty of 6½ per cent is levied on diamonds the value being fixed by the Crown Agents, also one of 15 per cent of the gold premium.

* Thanks are due to the Secretary for Mines, Gold Coast, for kindly furnishing the information from which this statement was compiled.

Amount of Royalties and their Assessment

Lignite 1¹/₂ d per ton mined

Iron ores or metallic iron 1 per cent of the value

Lead ores or metallic lead If containing on an average less than 4 oz of silver per ton pay 2 per cent of the value If containing more than 4 oz of silver per ton an additional 3 per cent is levied on the value of the silver

Tin ores and metallic tin When the value of metallic tin per ton

is

Less than £180 the royalty is 2 per cent of the value

£180 but less than £190 the royalty is 3 per cent of the value

£190 but less than £200 the royalty is 4 per cent of the value

£200 but less than £220 the royalty is 5 per cent of the value

£220 but less than £240 the royalty is 6 per cent of the value

£240 but less than £260 the royalty is 7 per cent of the value

£260 but less than £280 the royalty is 8 per cent of the value

£280 but less than £300 the royalty is 9 per cent of the value

£300 or upwards the royalty is 10 per cent on the value

Wolfram When the value per unit does not exceed 35s the royalty is 1 per cent of the value

When the price per unit exceeds 35s the royalty is 1 per cent of the value plus $\frac{1}{10}$ per cent for every shilling or fraction of a shilling by which the value exceeds 35s but so that no royalty shall be payable at higher rate than 5 per cent of the value

Gold On gold of any fineness 6 per cent of what its value would be if it were pure gold

Other precious metals 5 per cent of the value

Mica 5 per cent on such sum as the Chief Inspector of Mines may assess as the local average value of mica Provided that if the person paying such royalty can prove that the assessed value on which such royalty was paid is in excess of the actual sale price (after deducting the cost of transport from the mine to the place of sale) the Chief Inspector of Mines shall refund the difference between the royalty charged and 5 per cent of such sale value after the aforesaid deduction has been made Any claim to a refund under this Regulation shall be made within six months of the despatch of the mica from Nigeria

COMPUTATION OF VALUES FOR ROYALTIES

Tin local silver gold and their ores and wolfram The value of these metals and their ores is deemed to be the value based on the actual London price of the metal or its equivalent the expression London price being deemed to mean the average of the daily

market sale price in London during the period of three months immediately prior to the 1st January, 1st April 1st July or 1st October, as the case may be next preceding the date of exportation

In the case of gold, 'London price' means the average of the daily market prices in London during the quarter immediately preceding the quarter in which the mineral is mined

The value of tin ore is deemed to be 70 per cent of the value of metallic tin

Mixed tin and wolfram concentrates These are deemed to be tin ore, but the exporters, on furnishing satisfactory proof of the actual composition of such ore are entitled to a refund of the difference between the royalty paid on such ore and that which would have been payable if the actual composition had been known at the time that the ore was exported

Iron and copper The value of these is deemed to be the actual market value of such metal in the London market on the 1st of January, April, July or October next preceding the exportation

In the absence of evidence to the contrary it is assumed that *lead ore* contains 78 per cent of lead, *iron ore (haematite)* contains 60 per cent of iron, *pig iron* contains 95 per cent of iron, and that *wolfram ore* contains 65 per cent of tungstic acid (WO_3)

Export Duties

Tin Export duty is payable on tin ore, but is remitted if it is being exported from Nigeria (or if won in the Cameroons under British Mandate) for smelting in the United Kingdom or in a British possession. The export duty is fixed at 50 per cent of the maximum royalty payable on the ore

An export duty of 3s 4d per ton of tin or tin ore has been levied as from 1st March, 1932, under the Customs Tariff Ordinance. This duty is a special charge imposed to cover the cost of the Nigerian contribution to the Tin Research and Propaganda Fund

No other minerals are liable to export duty

Rents under Mining Leases

The rents normally payable in respect of mining leases are as follows

Class A *Metalliferous minerals and precious metals lode leases* 10s per acre or part thereof per annum

Class B *Metalliferous minerals and precious metals alluvial leases* 5s per acre or part thereof per annum

Class C *Precious stones leases* Diamond prospecting prohibited

Class D *Carbonaceous minerals leases* Prospecting for coal is prohibited, but certain areas have been thrown open to prospect-

ing for lignite, and carbonaceous minerals leases can be obtained for the mining of lignite at the rate of 6d per acre or part thereof per annum

Class E *Earthy minerals leases* Mica, 1s per acre or part thereof per annum

Mining rights are granted when there is reason to believe that the mineral bearing qualities of the land are not such as to justify an application for a mining lease. A mining right may be granted in respect of a stream and the land lying within 100 yds of the centre of the stream, and may not exceed one mile in length. The title is granted for one year only, and renewal is dependent upon fulfilment of the conditions imposed. The obligation in the case of mining rights granted for tin is based on output calculated at the rate of 1 ton of tin ore per annum for each mile of mining right. The rent on mining rights granted for tin is £1 per annum per 100 yds or part thereof

In order to assist the mining industry during the depression a number of concessions were granted in respect of all mining titles held for tin including particularly reduced rents, suspension of labour obligations and remission of suspension fees

Additional concessions have been made to the tin mining industry on account of the compulsory restriction of output—e.g.

(1) Any person owning a water right granted under the Minerals Ordinance who is, owing to restriction, unable to make full or any use of it may apply to the Chief Inspector of Mines for exemption or partial exemption of the terms under which it is held

(2) On total cessation of mining operations by an owner the mineral rent payable is reduced to 1d per acre for mining leases and 4d per 100 yds for mining rights

Period and Renewal of Mining Leases

Leases are granted for a term not exceeding 21 years, and provided that the lease at the time of expiry is not liable to be forfeited under any of the provisions of the Minerals Ordinance, the holder is en

be raised under normal circumstances

Practically all the mining in Nigeria is confined to alluvial ground and there are no special conditions governing the renewal of leases other than those quoted

NORTHERN RHODESIA*†

The right to work minerals in Northern Rhodesia can be acquired from the British South Africa Company either by taking out a Prospecting Licence and proceeding as prescribed in the Northern Rhodesia Mining Proclamation, 1912, or by direct grant from the Company, to which the provisions of the Mining Proclamation apply *mutatis mutandis* when registered

Amount of Royalties and their Assessment

Royalties are fixed by the British South Africa Company

The Prospecting Licence provides that no mining location other than an alluvial claim or a coal location shall be worked for profit until terms upon which such working for profit shall have been arranged with the British South Africa Company

While the Prospecting Licence provides for terms for working for profit, the Mining Proclamation provides that no location may be worked until consent has been obtained from the Company and notice of intention to work given to the Commissioner for Mines. These terms would include any royalties which the British South Africa Company might seek to charge upon minerals recovered, and under this procedure royalties have been fixed from time to time. Such royalties have usually been upon the basis of 5 per cent of the gross value of the product

Coal In the case of locations pegged and registered under Prospecting Licences the royalty payable to the British South Africa Company is 1s per ton (2,000 lb) in excess of 20 tons raised in each year from every 100 acres, but no royalty is payable on coal consumed in the furnaces on the location for the purpose of profitably working the same for coal

Exclusive prospecting rights over the greater part of Northern Rhodesia have been granted to Concession Companies, and in certain cases rights to mine and win minerals have been granted direct by the British South Africa Company. In the majority of these cases royalties upon copper, lead, zinc, vanadium, gold and silver have been fixed as follows

Copper, lead or zinc (produced in metallic form) In accordance with the following sliding scales in respect of each long ton of copper, lead or zinc produced

* A new Mining Ordinance is under consideration, which, if it becomes law, may modify the information here given.

† Thanks are due to the Commissioner for Mines, Northern Rhodesia, and the Secretary, British South Africa Company, for kindly furnishing the information from which this statement was compiled.

Sliding scale for copper

P = The average London Metal Exchange price of copper during the month in which the copper was produced

When the price (P) is

- (1) Less than £55, the royalty is 2 per cent of the price
- (2) £55, but less than £60, the royalty is $2\frac{1}{2}$ per cent of the price
- (3) £60, but less than £80, $2\frac{1}{2}$ per cent of the price plus 10 per cent of such portion of the price as exceeds £60
- (4) £80 or more, 5 per cent of the price plus 10 per cent of such portion of the price as exceeds £80

Sliding scale for lead

P = The average London Metal Exchange price of lead during the month in which the lead was produced

When the price (P) is

- (1) Less than £15, the royalty is $1\frac{1}{2}$ per cent of the price
- (2) £15, but less than £20, $1\frac{1}{2}$ per cent of the price plus 1 per cent of such portion of the price as exceeds £15
- (3) £20, but less than £25, 2 per cent of the price plus $4\frac{1}{2}$ per cent of such portion of the price as exceeds £20
- (4) £25, but less than £30, 3 per cent of the price plus $5\frac{1}{2}$ per cent of such portion of the price as exceeds £25
- (5) £30 or more, 4 per cent of the price plus 6 per cent of such portion of the price as exceeds £30

Sliding scale for zinc

The royalty per ton of zinc produced is 2 per cent of the average London Metal Exchange price of zinc during the month in which the zinc was produced, plus 10 per cent of such portion of the price as exceeds £25

Silver, copper, lead or zinc produced and sold or removed from the area in which it occurs, contained in any ore, concentrates, matte or any other incompletely treated mineral product the royalty payable is calculated as above, except that in the case of copper, lead and zinc the royalty is calculated per ton of fine copper, lead or zinc contained in the product, and that in all cases from the amount of the royalty so ascertained there is deducted such percentage (varying if necessary in the case of each different product) as shall make a fair allowance for the proportion of metal contained in the product which ought to be regarded as irrecoverable by ordinary current metallurgical or other practice

If more than one mineral is contained in any product, the value of each mineral is calculated separately for royalty purposes, except in the case of products sold as vanadium ores or vanadium concen-

trates (where the principal value of the product is due to its vanadium content), the royalty upon which is calculated as shown below

Vanadium Upon vanadium ores, concentrates or ferro vanadium, 5 per cent of the gross value of the product (including its gold, silver, copper, lead or zinc contents, if any) The term "gross value" is defined as being the gross price which the grantee would have received for the product as the result of a *bona fide* sale at market value by delivering the product to the purchaser at the point of sale without any allowance for transport to the point of sale, selling commission, insurance, cost of realization or otherwise

If vanadium ores or concentrates are sold for delivery in Africa south of the Equator otherwise than for purposes of export without further treatment, the British South Africa Company is, at its discretion, entitled to calculate the royalty payable in respect of such sale upon the gross value (as above defined) of the final product of such ores or concentrates

Gold The value of gold for royalty purposes is calculated at 85s per fine oz plus the amount of premium, if any, which may be realized for the gold upon its sale

In any month in which the value for royalty purposes of all minerals produced from the area of the grant is less than £200 no royalty is payable in respect of the gold produced during that month Should the value of the gold produced in any month be not more than £3 000, the royalty for that month will be a sum equal to $2\frac{1}{2}$ per cent of the value

Should the value of the gold produced in any month exceed £3,000, the royalty for that month will be 5 per cent of the value if the yield per ton (2,000 lb) does not exceed 85s, or $7\frac{1}{2}$ per cent of the value if the yield per ton exceeds 85s

Provided that

(1) If the gold produced has been obtained from not less than 5,000 tons of ore and the yield per ton is not greater than 22s, the royalty for that month shall be $3\frac{1}{2}$ per cent of the value

(2) If
10,000 t
the roy:

When the gold is produced in the form of ore, matte, concentrates or any other form of incompletely treated product, the royalty upon

for the proportion of metal contained in the product which ought to be regarded as irrecoverable by ordinary current metallurgical or other practice

Silver (produced in metallic form) 5 per cent of the value of the silver produced calculated at the average quotation per fine oz

of silver by Messrs Samuel Montagu and Co during the calendar month in which the silver was produced

Rents under Mining Leases

There is no system of mining leases. The right to win minerals continues for so long as title to a mining location is maintained by the owner. The surface of the land on which the minerals are found defines the surface.

The performance of the work as a condition of title and the payment of the following rents

Coal location £1 per annum for each 100 acres

Alluvial claims On the expiration of 31 days from the date of registration, £1 per month. The area of a claim for precious metals is 200×200 ft

Period and Renewal of Mining Leases

There is no system of mining leases in force at present

NYASALAND*†

The area of the Nyasaland Protectorate is about 39,315 sq miles, and, of this, mineral rights over about 17,032 sq miles are held in private ownership subject to the payment of royalty to Government. Mining and prospecting in these areas can only be carried out by arrangement with the owners of the mineral rights

Amount of Royalties and their Assessment

Coal No royalty has yet been fixed

Precious metals No royalty has yet been fixed, but in the cases of gold and silver may be an amount not exceeding 5 per cent of the value of the gross output

Precious stones No royalty has yet been fixed, but in the case of diamonds may be an amount not exceeding 10 per cent of the value of the gross output

* Thanks are due to the Director of the Geological Survey and Director of Mines, Nyasaland, for kindly furnishing the information from which this statement was compiled

† Prospecting and mining in Nyasaland is at present controlled by the Mining Ordinance, 1906 and rules and regulations thereunder, but a new Ordinance is under consideration which will involve considerable changes from the existing legislation

<i>Asbestos</i>	5 per cent on the sale price
<i>Mica</i>	10 per cent on the sale price
<i>Plumbago</i>	5 per cent on the sale price

Rents under Mining Leases

Mining leases For mining precious metals or precious stones the rent will be fixed by the Governor, with a minimum of 1s and a maximum of £1 per acre per annum

Mineral leases For mining base metals or minerals the rent will be fixed by the Governor, with a minimum of 6d and a maximum of 5s per acre per annum

Rent is payable irrespective of and additional to any sums payable for royalties

Period and Renewal of Mining Leases

Mining leases As may be fixed by the Governor

Mineral leases As may be fixed by the Governor, with maximum period of 21 years

SIERRA LEONE*

The entire property in and of all minerals and mineral oils in, under or upon any lands, and of all rivers, streams and watercourses throughout Sierra Leone is vested in the Crown

Amount of Royalties and their Assessment

Iron ore 5 per cent of the assessable profits

Chromite 1s 3d per ton

Gold On crude gold, 9 per cent of the ascertained value of the combined gold and silver content of the crude metal as shown by the refiner's certificate. The value of refined gold and refined silver, for the purpose of computing royalty, is deemed to be the actual market prices in the London market on the day on which the refiner's certificate is given

Platinum 5 per cent of the value. Only crude platinum is exported and the value is computed thus. The price is assumed to be the actual market price of refined platinum in the London market on the nearest day to the 1st January, April, July or October on which the price of platinum is quoted, and crude platinum is assumed to contain 75 per cent platinum metal

* Thanks are due to the Chief Inspector of Mines, Sierra Leone, for kindly furnishing the information from which this statement was compiled.

Diamonds A royalty of 27½ per cent of the net profit, which is ascertained as follows

(a) The profit resulting from the production and sale of diamond and other minerals recovered in conjunction therewith shall be ascertained after charging all operating and overhead expenses and depreciations including the annual rent or proportion thereof payable which shall be charged in the Company's operating accounts as rent payable and all interest payable on capital sums borrowed except to the extent that such interest may be covered by interest receivable. In ascertaining the profit for each accounting period the stock of unsold diamond and of such other mineral as aforesaid held by the Company at the close of such period shall be valued for the purposes of the account at the nominal figure of £1

(b) There shall be deducted from the profits ascertained in accordance with (a) above

(1) An amount of 5 per cent of the profit so ascertained and this sum shall be transferred to general reserve

(2) The amount of any losses brought forward from previous accounting periods except to the extent that such losses may be reduced by transfers from the general reserve

The balance thus ascertained shall be deemed to be the "net profit"

Ilmenite 1s per ton

In practice each royalty is collected in the form of an export duty

Rents under Mining Leases

Class A *Precious metals lode leases* 10s per acre or part thereof per annum

Class B *Precious metals alluvial leases* 5s per acre or part thereof per annum

Class C *Metalliferous minerals lode leases*, 10s per acre or part thereof per annum

Class D *Metalliferous minerals alluvial leases*, 5s per acre or part thereof per annum

Class E *Precious stones leases* An exclusive licence was recently granted for a period of ninety nine years to prospect for and work diamonds in the whole of the Colony (excluding the areas comprised in the Marampa Concession and Tonkolili Agreement Area) at an annual rental of £7,000

Class I *Carbonaceous minerals leases* } Such rent as may here
Class G *Earthy minerals leases* } after be prescribed

Both rent and royalty are payable in respect of mining leases

A mining right, which is renewable annually, is granted for the

purpose of working small alluvial areas of which the mineral bearing qualities do not justify application for a lease. A mining right may be granted for a stream and the land lying within 100 yds of the centre of the stream. The rent for a mining right is £1 per annum for each 100 yds or part thereof measured along the course of the stream.

Period and Renewal of Mining Leases

The holder of a mining lease has the right to one renewal up to 99 years.

SOMALILAND PROTECTORATE*

The entire property in and control of all minerals† and mineral oils in, under or upon any lands in Somaliland Protectorate, and of all rivers, streams and watercourses throughout the Protectorate, is vested in the Crown save in so far as such rights may in any case have been limited by any express grant made before the commencement of the Mining Ordinance 1928.

Amount of Royalties and their Assessment

Non precious minerals 2 per cent of the product or the equivalent value thereof at the mine at the discretion of the Controller of Mines.

Precious minerals ‡ 4 per cent of the product or the equivalent value thereof at the mine, at the discretion of the Controller of Mines.

Export Duties

Export duties on minerals are at the rate of 10 per cent *ad val*, calculated in accordance with Section 6 (b) (ii) of the Customs Ordinance.

Rents under Mining Leases

If the royalty payable during any one year exceeds the rent reserved in any mining lease granted under the provisions of the Mining Ordinance, 1928, the amount paid as rent may be deducted from the sum payable as royalty, and if the royalty payable amounts to less than the rent paid for any year, then no royalty is payable in respect of such year.

* Thanks are due to the Secretary to the Government Somaliland Protectorate for assistance given in the preparation of this statement.

† Minerals include precious and non precious minerals and all materials of economic value forming part of or derived naturally from the earth's crust other than mineral oil, peat, natural gas and vegetation.

‡ *Precious minerals* include precious stones, precious metals and ores of precious metals.

tax Royalty is not payable on the amount of the tax paid A refund of one sixth of the tax is granted where an amount at least equal to the total tax paid is expended on the development or equipment of a new property

Rents under Mining Leases

The only type of mining lease which exists in this Colony is a Special Grant No fixed scale of rental is laid down, each grant being the subject of individual consideration on its merits

Period and Renewal of Mining Leases

No system of mining leases is in operation The right to win minerals continues for so long as the title to a mining location is maintained by the registered holder

SOUTH-WEST AFRICA*

In the Mandated Territory† of South West Africa the mineral rights on all lands are vested in the Crown, and the owner of private land participates in the royalty payable to the Administration to the extent of one quarter of such royalty

Amount of Royalties and their Assessment

The royalties payable to the Administration on the gross proceeds‡ of the minerals and metals detailed below are as follows

Copper, lead, zinc silver, and tungsten ores 1 per cent

Tin ore 4 per cent

Lithium, beryllium, and vanadium ores 2 per cent

Tantalum and titanium ores 1 per cent

Gold 10 per cent

Diamonds 60 per cent of the gross proceeds less 70 per cent of the approved working costs In addition, an export duty of 10 per cent is payable

Fluorspar 1 per cent

* Thanks are due to the Inspector of Mines and the Mining Authority, South West Africa for kindly furnishing the information from which this statement was compiled

† Territory mandated to the Union of South Africa

‡ *Gross proceeds* means the total selling price of any consignment or lot of minerals or metals without the deduction of charges for transport, labour dues insurance assaying, handling smelting and refining or any other deduction whatsoever

Phosphates and guano 5 per cent

Salt 2 per cent

Semi precious stones 2 per cent

All minerals not mentioned above are free of royalty

Export Duties

No export duties are levied on minerals except in the case of diamonds (*see p 44*)

Rents under Mining Leases

The rents payable in respect of mining leases or concession grants vary with the area applied for but in most cases amount to 1s per sq kilometre per annum on the total area held under concession

In the case of converted mining areas held under title the claim tax in the case of base minerals* is 1s per hectare (2 47 acres) per annum for mining areas converted prior to 1st July, 1934, and 2s 6d per hectare (2 47 acres) per annum for mining areas converted after that date with a minimum of 40s per mining area. The claim tax for precious minerals† mining areas is 30s per hectare per annum for mining areas converted prior to 1st July 1934, and 40s per hectare per annum for mining areas converted after that date. Most diamond mining areas bear a tax of 1s 6d per hectare per annum

Period and Renewal of Mining Leases

Converted mining areas are held under indisputable title and confer the right to mine the minerals mentioned in perpetuity on condition that the claim taxes which are payable six monthly in advance, are duly paid

SWAZILAND‡

Mining in Swaziland is carried out under the authority of concessions granted by the late Swazi King Mbandeni and under the Crown Lands and Minerals Orders in Council, 1908 and 1910, and legislation issued thereunder

There are 21 mineral areas which belong wholly to the Swaziland Government and 28 owned by concessionaires only

* *Base minerals* comprise all metals and their ores not included under

†
‡

andly

Amount of Royalties and their Assessment

The holder of any concession for precious or base metals or precious stones, in addition to any rents, royalties or other moneys payable under the concession, is liable to pay the following royalties

Base metals Such royalty as will, together with any royalty payable under the concession, amount to $2\frac{1}{2}$ per cent of the value of such base metals on severance from the soil

Gold 10 per cent in respect of the produce of gold

When under the terms of a mineral concession the holder is liable on the happening of a certain event to pay over and above any rental or other sum theretofore payable by him, either a sum in the nature of a bonus or sum in the nature of rental, or both, such holder may commute such contingent liability for a liability to pay a royalty of $2\frac{1}{2}$ per cent of the annual net produce obtained from mining, such net produce shall be taken to be the value of the precious or base metals produced after deduction therefrom of the cost of production

The royalty payable in respect of a commuted mineral concession shall be in addition to (a) any sum in the nature of rental or royalty which may be payable under the terms of such concession at the date of commutation, and (b) any sum payable in respect of such concession under the provisions of Section 19 of Swaziland Proclamation No 3 of 1904

Rents under Mining Leases

Five mining areas have been leased by the Government

- 1 Area of 991 morgen* for base metals at £25 per annum
- 2 Area of 2,486 morgen for precious or base metals at £30 per annum
- 3 Area of approximately 300 morgen for base metals at £200 per annum
- 4 Area of 40,000 morgen for base metals at £100 per annum
- 5 Area of 172 morgen for precious and base metals at £205 per annum

In Crown areas thrown open to prospecting and in areas belonging to concessionaires which are thrown open to prospecting there is a charge of 1d per claim per month for base metal claims for the first year, thereafter 6d per claim per month

Precious metal claims pay 2s 6d per month each, while diggers' claims pay 20s per claim per month

Period and Renewal of Mining Leases

The five areas referred to above under Rents have been leased as follows

* One morgen = 2 1165 acres

- 1 For 10 years, renewable for 10 years at a time, not exceeding 50 years in all
- 2 For 3 years, renewable for 3 years at a time, not exceeding 21 years in all
- 3 For 5 years, renewable for a further period of 4 years
- 4 For 50 years
- 5 For 3 years, renewable for 2 periods of 3 years each

TANGANYIKA TERRITORY*†

The entire property in and control of minerals in the Territory is vested in the Governor in trust for His Majesty as Sovereign of the Mandatory Power save in so far as such right may have been limited by any express grant made before the commencement of the Mining Ordinance, 1929

Amount of Royalties and their Assessment

Coal 30 cents per ton

Tin ores and metallic tin When the price of the metal per ton is less than £160 the royalty is 2 per cent of the gross sum realized, the rate being increased by 1 per cent for each £20 increase in the price of the metal from £160 to under £300. When the metal is £300 or over per ton, the royalty is 10 per cent of the gross sum realized

Precious metals (gold silver and platinoid group metals) 5 per cent of the gross sum realized. In 1934, an official announcement was made that there was no intention to increase the royalty on gold above 5 per cent during the present decade.

Precious stones 10 per cent of the gross value. Precious stones—*e.g.*, diamond emerald opal, ruby, etc.—are valued by the Diamond Detective Department, Union of South Africa, or by the Diamond Valuer to the Crown Agents for the Colonies in London, and royalty is payable on that value

Non precious minerals ‡ Minerals other than those in respect of which a specific royalty is or may be prescribed and those taken in accordance with the provision of Section 7 of the Mining Ordinance, 1929, pay 5 per cent of the gross sum realized, except mica waste and splittings under 0.002 in thickness, which pay no royalty

* Territory mandated to Great Britain

† Thanks are due to the Commissioner of Mines, Tanganyika, for kindly furnishing the information from which this statement was compiled.

‡ *Minerals*, as defined in the Mining Ordinance, includes all mineral substances other than mineral oils.

Rents under Mining Leases

Rent on an original mining lease is 5s per acre per annum

Rent on a mining lease is payable in addition to royalties

Period and Renewal of Mining Leases

Mining leases are granted for a term of not less than 5 and not more than 21 years. At the expiration of the term for which the lease was originally granted or any renewal thereof the lessee is entitled, on giving due notice, fulfilling the conditions of his lease and on payment of the prescribed fee, to obtain a renewal for a further term, not exceeding 21 years upon the conditions which are then generally applicable to new mining leases. Providing, however, that the term of the lease and any subsequent renewals thereof shall not exceed in all a period of 99 years.

UNION OF SOUTH AFRICA*

The basis of mining law in the Union of South Africa is State ownership of the right of mining and disposal of precious metals. Where this principle is not derived from the system of land tenure in a particular province it is established by the statute governing the mining and disposal of precious metals, either through enactment of a definite prescription or by implication. In the Transvaal and Natal the statutes arrogate this right to the State by recital in the context, in the Orange Free State it flows from the construction and wording of the statute, and in the Cape the precious mineral law applies only to land held subject to a reservation of the principal precious minerals to the Crown.

The State ownership of the right of mining and disposal of precious minerals has hitherto maintained a purely academic character, since the policy of successive Governments and the legislation governing

of mining leases and in general taxation of the profits of mining. Legislative prescription for the establishment of State mines is, however, a feature of the Precious and Base Metals Act, 1908, of the Transvaal.

In order to permit of exploitation of precious minerals by private enterprise, various forms of mining title have been created by the different statutes of the four provinces, the two most important being the "Mynpacht," or owner's mining right and the "claim." The

* Thanks are due to the Secretary for Mines, Union of South Africa, for kindly supplying this statement.

mer is common to the Transvaal and the Orange Free State and the latter exists in all four provinces although varying in size and conditions of tenure according to the incidents of the provincial statute provision is made in all the mining laws for registration of the various forms of mining title, and such registration is effected independently of the proprietary rights pertaining to the land over which the mining title is held. Arising out of statutory incident the ownership of the adjacent land and the mining title is not necessarily or in the main identical.

Reference to the "Mynpacht" incurs the necessity for explaining that, while the State has derogated from the Roman Dutch principles of land ownership by investing itself with the rights described at the beginning of this section, the owner of land or holder of mineral rights over private land nevertheless enjoys the preferential right of securing mining title on land brought under the operation of the mineral laws after the discovery of precious minerals in payable quantities thereon. In the Transvaal and the Orange Free State this preferential right is expressed in the "Mynpacht," or owner's

down by statute. The tendency of modern legislation on the subject is to abandon methods of disposal based on the unitary form of mining title of fixed dimension, such as the "claim," and to substitute therefor the leasing of economic units, each comprising as nearly as possible a workable mining proposition. This legislative tendency is exemplified by Act No. 36 of 1934, which substantially amends the Precious and Base Metals Act, 1908, of the Transvaal.

Precious minerals Crown land. As regards the disposal of rights to mine on Crown land, the broad legislative principles are not very different from those applying to private land falling to the disposal of the State after the owner's preferential statutory rights have been met.

Precious minerals on land held with a reservation of minerals to the Crown. By enactment of the Reserved Minerals Development Act, 1926, the Legislature has placed the owner of land falling in this category very much in the same position as the full owner of land, although his position is circumscribed by prescriptions calculated to protect the Government against claims for damage arising out of resumption of the surface of his land for mining purposes.

Base minerals. The cardinal principle of South African mining law in regard to base minerals is that the common law rights of the private owner of land are undisturbed. In the province of Natal the mining law purports to vest the base mineral rights in the Crown, in a general statement defining the prerogatives of the Crown, but the context of the law reveals the

adumbrated

Amount of Royalties and their Assessment

The holder of any concession for precious or base metals or precious stones, in addition to any rents, royalties or other moneys payable under the concession, is liable to pay the following royalties

Base metals Such royalty as will, together with any royalty payable under the concession, amount to 2½ per cent of the value of such base metals on severance from the soil

Gold 10 per cent in respect of the produce of gold

When under the terms of a mineral concession the holder is liable on the happening of a certain event to pay over and above any rental or other sum theretofore payable by him, either a sum in the nature of a bonus or sum in the nature of rental, or both, such holder may commute such contingent liability for a liability to pay a royalty of 2½ per cent of the annual net produce obtained from mining, such net produce shall be taken to be the value of the precious or base metals produced after deduction therefrom of the cost of production

The royalty payable in respect of a commuted mineral concession shall be in addition to (a) any sum in the nature of rental or royalty which may be payable under the terms of such concession at the date of commutation, and (b) any sum payable in respect of such concession under the provisions of Section 19 of Swaziland Proclamation No 3 of 1904

Rents under Mining Leases

Five mining areas have been leased by the Government

- 1 Area of 991 morgen* for base metals at £25 per annum
- 2 Area of 2,486 morgen for precious or base metals at £30 per annum
- 3 Area of approximately 300 morgen for base metals at £200 per annum
- 4 Area of 40,000 morgen for base metals at £100 per annum
- 5 Area of 172 morgen for precious and base metals at £205 per annum

In Crown areas thrown open to prospecting and in areas belonging to concessionaires which are thrown open to prospecting there is a charge of 1d per claim per month for base metal claims for the first year, thereafter 6d per claim per month

Precious metal claims pay 2s 6d per month each, while diggers' claims pay 20s per claim per month

Period and Renewal of Mining Leases

The five areas referred to above under Rents have been leased as follows

* One morgen = 2 1165 acres

UGANDA

The entire property in oil in Uganda is vested in the Government. No person can acquire such property and no person can claim recognition of title or exercise of rights.

Amount of Royalties and their Assessment

Royalties are fixed by Regulation for 9,000 sq. miles of native land, divided into parcels of mission and freehold land, which belong to the landowner. A portion of the proceeds of sale of such land is paid as royalty to the Crown. A portion of the proceeds of sale of non-Crown lands and no portion of the proceeds of sale of Crown lands is likely to be demanded by the Government.

Royalties provided for in the Regulations, 1935, are as follows:

Cool. 30 cents per ton

Tin. When the gross sum realized is less than £100 per ton, of metallic tin, 2 per cent. of such gross sum; the rate being increased by 1 per cent. for each £20 increase in the price of the tin, until £100 to under £300. When the price is £300 or over per ton, the royalty is 10 per cent. of the gross sum realized.

Precious metals. 5 per cent. of the gross sum realized

Precious stones. 10 per cent. of the gross value in London

Non-precious minerals (except tin). 5 per cent. on the gross sum realized. By definition "minerals" do not include mineral oil, clay, murrum, limestone, chalk, sand or other stone commonly used for building, or such other mineral substances as the Governor may by notice in the *Gazette* declare not to be minerals for the purpose of the Mining Ordinance, 1935.

When it is desired to export any mineral, the Commissioner of Mines estimates the amount, being an approximation to the amount which is for this purpose assumed.

A provisional royalty is paid locally before an export permit is issued.

Within six months the exporter must produce a Sales Account, the ascertained price and assay upon which final royalty is computed, and a refund or further collection adjustment is made. The gross price realized is adopted without deductions for transport, assay, returning or similar charges.

* Thanks are due to the Director of the Geological Survey, Uganda, for kindly furnishing the information from which this statement was compiled.

Rents under Mining Leases

Rent on an original mining lease is 5s per acre per annum

Rent on a mining lease is payable in addition to royalties.

Period and Renewal of Mining Leases

Mining leases are granted for a term of not less than 5 and not more than 21 years. At the expiration of the term for which the lease was originally granted or any renewal thereof the lessee is entitled, on giving due notice fulfilling the conditions of his lease and on payment of the prescribed fee to obtain a renewal for a further term, not exceeding 21 years upon the conditions which are then generally applicable to new mining leases. Providing however that the term of the lease and any subsequent renewals thereof shall not exceed in all a period of 99 years.

UNION OF SOUTH AFRICA*

ticular province it is established by the statute governing the mining and disposal of precious metals either through enactment of a definite prescription or by implication. In the Transvaal and Natal the statutes arrogate this right to the State by recital in the context, in the Orange Free State it flows from the construction and wording of the statute and in the Cape the precious mineral law applies only to land held subject to a reservation of the principal precious minerals to the Crown.

The State ownership of the right of mining and disposal of precious minerals has hitherto maintained a purely academic character, since the policy of successive Governments and the legislation governing mining and disposal of precious metals have recognized the advantages of exploitation by private enterprise. The rights vested in the State are vindicated by participation in the profits earned by the holders of mining leases and in general taxation of the profits of mining. Legislative prescription for the establishment of State mines is, however a feature of the Precious and Base Metals Act, 1908, of the Transvaal.

In order to permit of exploitation of precious minerals by private enterprise various forms of mining title have been created by the different statutes of the four provinces, the two most important being the "Mynpacht," or owner's mining right and the "claim." The

• Thanks are due to the Secretary for Mines Union of South Africa for kindly supplying this statement.

former is common to the Transvaal and the Orange Free State and the latter exists in all four provinces although varying in size and conditions of tenure according to the incidents of the provincial statute. Provision is made in all the mining laws for registration of the various forms of mining title, and such registration is effected independently of the proprietary rights pertaining to the land over which the mining title is held. Arising out of statutory incident the ownership of the subjacent land and the mining title is not necessarily or in the main identical.

Reference to the 'Mynpacht' incurs the necessity for explaining

rights over private land nevertheless enjoys the preferential right of securing mining title on land brought under the operation of the mineral laws after the discovery of precious minerals in payable quantities thereon. In the Transvaal and the Orange Free State this preferential right is expressed in the "Mynpacht," or owner's mining area, and in the Cape and Natal the owner has the prior right of beaconing a number of claims.

The residual mining ground remaining after selection of the owner's mining rights falls to the disposal of the State in the manner laid down by statute. The tendency of modern legislation on the subject is to abandon methods of disposal based on the unitary form of mining title of fixed dimension, such as the "claim," and to substitute therefor the leasing of economic units, each comprising as nearly as possible a workable mining proposition. This legislative tendency is exemplified by Act No. 36 of 1934, which substantially amends the Precious and Base Metals Act 1908, of the Transvaal.

Precious minerals Crown land As regards the disposal of rights to mine on Crown land, the broad legislative principles are not very different from those applying to private land falling to the disposal of the State after the owner's preferential statutory rights have been met.

Precious minerals on land held with a reservation of minerals to the Crown By enactment of the Reserved Minerals Development Act, 1926, the Legislature has placed the owner of land falling in this category very much in the same position as the full owner of land, although his position is circumscribed by prescriptions calculated to protect the Government against claims for damage arising out of resumption of the surface of his land for mining purposes.

Base minerals The cardinal principle of South African mining law in regard to base minerals is that the common law rights of the private owner of land are undisturbed. In the province of Natal the mining law purports to vest the base mineral rights in the Crown in a general statement defining the prerogatives of the Crown, but the context of the law reveals the principle adumbrated

Rents under Mining Leases

Rent on an original mining lease is 5s per acre per annum

Rent on a mining lease is payable in addition to royalties

Period and Renewal of Mining Leases

Mining leases are granted for a term of not less than 5 and not more than 21 years. At the expiration of the term for which the lease was originally granted or any renewal thereof the lessee is entitled, on giving due notice, fulfilling the conditions of his lease and on payment of the prescribed fee to obtain a renewal for a further term, not exceeding 21 years upon the conditions which are then generally applicable to new mining leases. Providing however, that the term of the lease and any subsequent renewals thereof shall not exceed in all a period of 99 years.

UNION OF SOUTH AFRICA*

The basis of mining law in the Union of South Africa is State ownership of the right of mining and disposal of precious metals. Where this principle is not derived from the system of land tenure in a particular province it is established by the statute governing the mining and disposal of precious metals either through enactment of a definite prescription or by implication. In the Transvaal and Natal the statutes arrogate this right to the State by recital in the context, in the Orange Free State it flows from the construction and wording of the statute and in the Cape the precious mineral law applies only to land held subject to a reservation of the principal precious minerals to the Crown.

The State ownership of the right of mining and disposal of precious minerals has hitherto maintained a purely academic character, since the policy of successive Governments and the legislation governing mining and disposal of precious metals have recognized the advantages of exploitation by private enterprise. The rights vested in the State are vindicated by participation in the profits earned by the holders of mining leases and in general taxation of the profits of mining. Legislative prescription for the establishment of State mines is, however, a feature of the Precious and Base Metals Act, 1908, of the Transvaal.

In order to permit of exploitation of precious minerals by private enterprise various forms of mining title have been created by the different statutes of the four provinces the two most important being the "Mynpacht," or owner's mining right and the "claim." The

* Thanks are due to the Secretary for Mines, Union of South Africa, for kindly supplying this statement.

Orange Free State and the arising in size and content of the provincial statute registration of the various forms of mining title and such registration is effected independently of the proprietary rights pertaining to the land over which the mining title is held. Arising out of statutory incident the ownership of the subjacent land and the mining title is not necessarily or in the main identical.

Reference to the *Mynpacht* incurs the necessity for explaining that while the State has derogated from the Roman Dutch principles of land ownership by investing itself with the rights described at the beginning of this section the owner of land or holder of mineral rights over private land nevertheless enjoys the preferential right of securing mining title on land brought under the operation of the mineral laws after the discovery of precious minerals in payable quantities thereon. In the Transvaal and the Orange Free State this preferential right is expressed in the *Mynpacht* or owner's mining area and in the Cape and Natal the owner has the prior right of

down by statute. The tendency of modern legislation on the subject is to abandon methods of disposal based on the unitary form of mining title of fixed dimension such as the claim and to substitute therefor the leasing of economic units each comprising as nearly as possible a workable mining proposition. This legislative tendency is exemplified by Act No. 36 of 1934 which substantially amends the Precious and Base Metals Act, 1908 of the Transvaal.

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Base minerals. The cardinal principle of South African mining law in regard to base minerals is that the common law rights of the private owner of land are undisturbed. In the province of Natal the mining law purports to vest the base mineral rights in the Crown in a general statement defining the prerogatives of the Crown but the context of the law reveals the principle adumbrated

above in regard to precious minerals that the owner of land has the prior right of securing mining title and for practical purposes his ownership therefore carries a proprietary interest in the base mineral on his land.

The Reserved Minerals Development Act 1926 is of application in regard to base minerals throughout the Union and has removed certain legal anomalies which formerly precluded the working of base minerals on certain lands in the Union which were held with a reservation of base minerals to the Crown. The broad principle of the Act in regard to base minerals is to place the surface owner in the position of a discoverer of base minerals on Crown land.

The right to mine and dispose of base minerals on Crown land is governed by separate provincial statutes and in general prescription is made in the first instance for acquisition by the individual of the right of entry and search under permit on Crown lands followed by provisions defining the mining title awarded after discovery and proof of profitability. The tendency of modern legislation in the case of base minerals all over the world is in the direction of granting an economic unit as a discovery award and in the Cape and the Transvaal the mining lease has been established by statute.

Precious stones. A consolidated law the Precious Stones Act 1927 is in force throughout the Union. The basic principle that the right of mining and disposing of precious stones vests in the Crown is enunciated in the Act. The latter lays down two principal methods for dealing with diamondiferous ground dependent on whether the deposit be a mine or whether it be alluvial. A diamond mine shall be proclaimed as such and if on private land or land held with a reservation of precious stones to the Crown the owner may elect to work it subject in the case of the full owner to the payment of one half of the realized profit and in the case of the nude owner to the payment of seven tenths to the State. The latter payment is also prescribed for the discoverer of a mine on Crown land.

In treating with alluvial deposits the Act is still based on the individualistic conception underlying former laws on the subject. It makes detailed provision for the allotment of claims to individuals qualified thereto after the prior rights of the owner of the land and of the discoverer have been satisfied. It is a cardinal principle of the Act that no association or corporate body may acquire or hold claims unless they accrue through ownership of the land on which they fall to be selected.

One important concession is made in regard to pre-existing rights. If the Minister of Mines is satisfied that precious stones were discovered or exploited before April 1927 on land in the Cape Province not subject to a reservation of precious stones to the Crown then the Act does not run. Certain existing mines are also exempt from the operation of the Act and remain subject to the prior laws governing their ownership and exploitation.

As in the case of precious and base minerals, the owner of land subject to a reservation of minerals to the Crown is recognized and accorded certain rights *qua* owner of the surface, to the selection of mining areas comprising a defined number of claims

Amount of Royalties and their Assessment

All royalties in respect of mining by the public under State licence or lease for precious or base metals have been repealed in favour of a tax on the profits of mining prescribed in the Income Tax Act, 1925 and its amendments. This Act applies throughout the Union of South Africa

Gold The rate of tax on gold mining companies is 4s in the £, and in certain circumstances gold mining companies are liable to Gold Mines Excess Profits Duty and the Gold Profits Surtax (see below)

Diamonds Companies mining diamonds pay tax at the rate of 3s in the £ in addition to the share of the profits taken by the Government (see p 52)

Other minerals The tax on other classes of mining companies is 2s 6d in the £ (Section 6). Persons other than companies carrying on mining operations are assessed to normal tax and super tax on graduated scales as indicated in Sections 6 (a) (iii) and 26 respectively, of the Income Tax Act, 1925. (For the tax year ended 30th June 1934 there was a temporary rebate of 20 per cent of the tax payable)

No allowance to cover exhaustion of the mineral contents of a mine is allowable under the Act. The procedure is that an allowance is made (Section 23) for the redemption, over the official estimated life of the mine of capital expenditure, as defined in that section, consisting of the cost of shaft sinking and equipment such as machinery, plant, buildings (underground and surface), also expenditure on development and general and administrative expenditure prior to commencement of production or during any period of non production. The annual allowance for redemption is the quotient resulting from the division of the total capital expenditure ranking for redemption (as described above) by the official estimated "life" of the mine

The "life" of the mine is revised when necessary, but, in any case in every third year, by the Union Government Mining Engineer, who acts in consultation with the technical staff of the mining concern

The redemption allowance is deducted annually from the net income—that is the proceeds of the mineral produced less the costs of production, general and administrative expenditure, and development costs. The balance remaining is the taxable income upon which tax is leviable

Gold Mines Excess Profits Duty Act No 33, 1933 (as amended by Acts No 43, 1934, and No 51, 1935), provides for the levy of a duty on the excess profits derived from the mining for gold in the Union arising from the increased price of gold accruing as a result of the Union's departure from the gold standard (commonly referred to as "the gold premium"), these profits being taxed on a sliding scale

The excess profit is determined by deducting from the profit earned by any person in respect of any mine during the period assessed a standard profit determined by applying the average of the profit per ton milled for the months of November and December, 1932, to the tonnage hoisted and milled during the period assessed *

From the excess profit so determined, the following deductions are made in order to arrive at the dutiable amount

(i) An amount equal to the tax leviable under the Income Tax Act upon such excess profit for the period assessed

(ii) Any portion of the redemption allowance claimable under the Income Tax Act which cannot be met from the standard profit

(iii) All expenditure which has been approved by the Minister of Finance and which is proved to the satisfaction of the Commissioner to have been actually and necessarily incurred during the period assessed in respect of underground equipment and shaft sinking, if such expenditure has been met from current revenue and has not been taken into account in the determination of the profit for such period †

(iv) An abatement of £10,000, diminished by £1 for every completed £3 by which the amount remaining of the excess profit after deduction of the amounts referred to in paragraphs (i), (ii), and (iii) above exceeds £10,000

The rate of duty chargeable is as follows

(a) Where the excess of the rate of actual profit per ton for the period assessed over the basic rate of profit (i.e., standard profit per ton hoisted and milled) for that period is not greater than 30d for each completed penny of such excess, 1 per cent of the dutiable amount

- * Provision has been made in Act No 51, 1935, for the fixing of a special standard profit for mines situated outside the mining districts of Johannesburg and Heidelberg in those cases in which it is established that the conditions of mining differ materially from those prevailing in those districts

† For the year ending 31st December, 1935, the expenditure as a whole ranking for deduction under this head will be limited to £1,500,000. Should the expenditure as a whole exceed that amount, the amount claimed as a deduction by each person will be proportionately reduced, and any portion of the expenditure so disallowed will be carried forward and taken into account in determining the dutiable amount of excess profit for any later period of assessment

(b) Where the excess of the rate of actual profit per ton over the basic profit per ton is greater than 30d, a percentage of the dutiable amount determined in accordance with the following formula

$$y = 60 - \frac{900}{x}$$

in which y represents such percentage and x represents the number of pence in the excess of the rate of actual profit per ton over the basic profit per ton

Gold Profits Surtax (Act No 51 of 1935) In addition to Gold Mines Excess Profits Duty the 1935 Act provides for the levy of a surtax on the profits derived during the calendar year ending 31st December, 1935, by any person from the mining of gold in the Union. The rate of surtax chargeable is 2s for each completed £1 of such profits after deduction of an abatement of £10,000, diminished by £1 for every £3 by which the amount of the profits exceeds the amount of the abatement *

Export Duties

Precious stones An export tax of 10 per cent is levied on the value of all uncut precious stones exported from the Union. Apart from this there is no export duty on the exportation of minerals from the Union

Rents under Mining Leases

On Crown land the sub surface rents payable on leases are as follows

Precious metals (Transvaal)

(a) 2s 6d per morgen (2 110 acres) per month for leases granted without prior proclamation of the land, subject to exemption from payment if sufficient development work is carried out. This exemption is not applicable to companies paying a dividend of more than 5 per cent

(b) In the case of proclaimed land, a rent equal to licence moneys—i.e., 2s 6d per claim (1 47 acres) per month, subject to exemption as above

Base metals (Transvaal)

(a) 2s 6d per morgen per month for leases granted without prior proclamation of the land, subject to exemption as above

- * The gold mines excess profits duty and gold profits surtax payable in respect of the calendar year ending 31st December, 1935, when added to the total amount of income tax leviable in respect of that calendar year upon the excess profits derived from mining for gold, shall not exceed as a whole 50 per cent of the excess profits derived as a whole during that calendar year from mining for gold. The excess profits as a whole will be determined in accordance with the provisions of Act No 33, 1933 (unamended)

(b) In the case of proclaimed land, a rent equal to licence moneys—i.e., 1d per claim (1 47 acres) per month for the first year and 6d per claim per month thereafter, both fees being subject to exemption as above

Base metals (Cape Province) .

Not exceeding 1s per acre per annum

Precious stones (Union of South Africa)

Rent equal to licence moneys—i.e., 5s per claim (45 feet \times 45 feet) per month

On private land in the Transvaal, where the right to mine precious metals is vested in the State, the sub surface rents payable under leases are as follows

(a) 6s per morgen per month for a lease granted prior to proclamation

(b) In the case of proclaimed land, a rent equal to claim licences—i.e., 5s per month per claim (1 47 acres) until ore is mined While ore is being mined, 20s per claim per month

In both the above cases, one half of the rent is paid to the owner of the land and remission of the Government's share is granted for satisfactory work except to Companies paying a dividend exceeding 5 per cent

Period and Renewal of Mining Leases

Leases are generally granted until such time as the minerals which are the subject of the lease are exhausted, so that no renewals are necessary apart from exceptional cases, when the leases would be renewed on the same conditions as before Should a lease be abandoned or a mine closed down without sufficient cause, the Government has power to grant a fresh lease by calling for tenders subject to the rights of the former lessee or mine holder as the case may be

AMERICA

DOMINION OF CANADA*

For the most part questions affecting mineral royalties and rents are administered by the separate Provincial Governments, with the exception of those relating to the Northwest Territories and Yukon, which are dealt with by the Federal Government.

The Governor in Council has authority, under the Export Act (Chap 3 R S C 1927) to impose duties on certain ores and minerals exported from Canada but so far no proclamation has been issued levying such duties. It would appear that several of the provinces have powers to impose under certain circumstances, duties on ores exported from the province in an unrefined state.

The Dominion Government deals with questions of the taxation of the income of mining companies throughout Canada, and by amendments to an Act known as the Special War Revenue Act, assented to on 28th June 1934 imposed a tax of 25 per cent of the premium value on new gold produced in Canada by operators who had paid dividends in 1932 and 1933 or during the six months prior to 19th April 1934. Premium value " under this Act was defined as the difference between \$20 6718 per fine ounce and the world market price converted into Canadian currency, and the Act became inoperative if the price of gold fell below \$30 an ounce.

Taxation of the premium value of gold under the Special War Revenue Act ended on 31st May, 1935, and was not renewed, but maintenance of the revenue derived under it from gold mines was provided for by changes in the Income War Tax Act. These, as announced by the Minister of Finance in his Budget speech of 22nd March, 1935, in so far as they affect gold mine profits, are briefly as follows

1 The rate of corporation income tax, payable on profits, is increased from $12\frac{1}{2}$ per cent to $13\frac{1}{2}$ per cent.

2 The deductions for depletion granted to precious metal mines on their corporation income tax is reduced from 50 per cent to $33\frac{1}{3}$ per cent, this proviso being effective for the 1934 taxation period in the case of mines not liable for the premium tax, and from 31st May, 1935, in the case of mines liable to that tax.

3 The depletion allowance on dividends granted to shareholders in gold mines is decreased from 50 per cent to 20 per cent.

* Thanks are due to the Deputy Minister of Mines, Ottawa, for kindly supplying this statement and for assistance rendered in the collection of information relating to the several provinces of Canada.

NOVA SCOTIA*

All minerals in Nova Scotia except limestone, gypsum and building materials are the property of the Crown in the right of the province of Nova Scotia

Amount of Royalties and their Assessment

Coal 12½ cents per ton (2,240 lb) removed from the demised area or areas on which the mine is situated, or used in the manufacture of coke or other manufactured fuel Coal used for domestic purposes by the workmen employed in and about such mine, and coal used in mining operations in and about the mine including coal used in locomotives or by railways owned or operated by the lessee in connection with the operations of the mine while such locomotives are exclusively engaged in transporting the coal so removed from the mine to any place of shipment or delivery within the county in which the mine is situated is not subject to payment of royalty

Iron 5 cents per ton of ore sold or smelted

Copper 4 cents per unit—that is upon every 1 per cent of copper contained in each ton of copper ore sold or smelted

Lead 2 cents per unit—that is upon every 1 per cent of lead contained in each ton of lead ore sold or smelted

Zinc 2 cents upon every unit—that is upon every 1 per cent of zinc contained in each ton of zinc ore sold smelted or shipped

Gold † 35 cents per oz, whether smelted or unsmelted

Silver † 2 cents per oz, whether smelted or unsmelted

Tin, precious stones and other minerals 5 per cent *ad val*

The foregoing provision does not apply to any mineral mined under the provisions of Chapter 7 of the Act for the Encouragement of Zinc Mining in the province of Nova Scotia

The Governor in Council may remit or refund part or all of the royalty charged or chargeable on any mineral heretofore mined or hereafter to be mined under any licence or lease

The Minister of Mines may by agreement with the lessee under any lease, for mineral other than coal, substitute during a period not exceeding 20 years for the royalties provided for by the lease or otherwise provided for by the Mines Act an annual royalty on the profits

* Thanks are due to the Deputy Minister of Public Works and Mines, Nova Scotia for kindly furnishing the information from which this statement was compiled.

† By the Act to amend Chap 22 of the Revised Statutes of Nova Scotia, 1923 (the Mines Act) the above royalties payable on gold and silver mined in the province under licence or lease are suspended until 31st March, 1937

in excess of \$10 000 during any calendar year from the mining, quarrying, reduction and processing of mineral from the said lease at the following rates

Upon annual profits in excess of \$10,000 and up to \$1,000,000, a royalty of 3 per cent

On the excess above \$1 000,000 up to \$5,000,000, a royalty of 5 per cent

On the excess above \$5 000 000 up to \$10,000,000, a royalty of 6 per cent

On the excess above \$10,000 000, a proportional increase of 1 per cent for each additional \$5,000,000

The annual profits of a mine are ascertained and fixed in the following manner

From the gross value of the year's output sold, utilized or shipped during the year there is deducted the cost of operation and expenses incurred during the year in question, to wit

1 The cost of transportation of any output of the mine sold, if such cost is borne by the operator, owner, occupant, or lessee

2 The working expenses of the mine, including the salaries and the wages of the workmen and employees of the mine, mills and plant, but exclusive of other salaries or wages

3 The cost of the necessary power and light for the operation of the mine mills and plant

4 The cost of explosives, fuel and any other supplies used in the mining operations and in the treatment of the minerals by the operator

5 The cost of insurance upon the equipment, the buildings at the mine and the stock in storage

6 An annual amount, based upon the probable annual average cost of repairs and renewals necessary to maintain operations in a condition of efficiency, to cover the depreciation due to ordinary wear and tear of the buildings and equipment, provided, however, that such amount shall not exceed 15 per cent of the value of same at the commencement of the year, as appraised by an assessor appointed by the Minister

7 The cost of work performed during the year in sinking shafts, making excavations and workings and trenching in or upon the mining property, with a view to opening up or testing for minerals

No allowance or deduction is made for the cost of new installations or new buildings made or erected during the year, nor for depreciation in the value of the mine by reason of exhaustion or partial exhaustion of minerals, due to the mining thereof

Where in the opinion of the Minister it is just and expedient and in the best interests of the province that special encouragement should be given for a limited number of years to the carrying on, or to the

and minerals " From 10th December, 1810, to 4th June, 1832, gold, silver and other mines and minerals were reserved From 24th October 1832 to 20th March, 1834 the reservation was as follows " All mines of gold silver and other precious metals and all coals in or under the said land, and full liberty at all times to search and dig for and carry away the same and for that purpose to enter upon the said land or any part thereof Subsequent to 20th March, 1834, the reservation was for gold silver and other mines and minerals "

Amount of Royalties and their Assessment

The only minerals* upon which the royalty has so far been fixed are the following

Coal and bituminous shale The rate actually levied is 10 cents per ton but according to the Mining Act of 1927 a royalty not exceeding 15 cents per ton may be levied on coal and oil shale

Oil and natural gas 5 per cent of the output or of its value at the well's mouth, at the option of the Lieutenant Governor in Council

Bog manganese In the only case where this ore is being mined at present the royalty levied is 10 cents per ton of bog material

The Lieutenant Governor in Council may, under Section 55 of the Mining Act 1927 whenever it shall be deemed necessary to assure speedy development provide that the royalty reserved under this Act shall not be imposed or collected upon any ores mined, wrought or taken until after ten years from the date of the mining lease

Rents under Mining Leases

Up to 1927 the rental for mining leases was \$50 per sq. mile, and most of the existing leases are on that basis In accordance with the law which came into effect on 21st April 1927, the annual rental is \$10 per 40 acres but the rental fixed under the old leases remains in effect Royalties due under leases are credited against the annual rental due under the lease

A mining licence, which is renewable from year to year and costs \$10 for each 40 acre claim, gives the holder the right to mine any minerals within its bounds except any which may have been already conveyed by the Crown under a licence or lease or disposed of in any other way

Period and Renewal of Mining Leases

Mining leases are issued for a first term of 20 years and under Section 113 of the Mining Act 1927, the lessee is entitled at intervals of 20 years up to a total of 80 years to the renewal of his lease upon the same terms, conditions and covenants as contained in the original

* For the purposes of the Mining Act 1927 the term 'minerals' does not include building and monumental stones millstones grindstones, sand gravel, pottery clay, soapstone peat or mineral waters

lease, provided that at the time of the renewal he is complying with those terms. Nevertheless, the Government has the right to increase the rate of royalty if it sees fit, provided that this power is contained in the original lease.

QUEBEC*

Under the British North America Act, 1867, mining rights were given to the respective provinces, so that today, over most of the territory of Quebec, the mining rights belong to the Crown, represented by the province. The province of Quebec owns the mining rights over most of its unsurveyed area, as well as in the townships and seignories, with the exception of a few mining concessions which have been granted from time to time, and in lands patented before 1880, where the rights to all the minerals, with the exception of gold and silver, have been given to the surface owner by an Act of the Legislature.

Amount of Royalties and their Assessment

It has been the practice since the beginning of 1925, when the royalty system was abandoned, to impose duties on the profits of mining operations. The following are the general rates upon profits arising from minerals† obtained from mines in the province.

Upon annual profits in excess of \$10,000 up to \$1,000,000 the rate is 3 per cent.

On the excess above \$1,000,000 up to \$5,000,000 the rate is 5 per cent.

On the excess above \$5,000,000 up to \$10,000,000 the rate is 6 per cent.

On the excess above \$10,000,000 up to \$15,000,000 the rate is 7 per cent.

On the excess above \$15,000,000 a proportional increase of 1 per cent for each additional \$5,000,000.

Asbestos mines form an exception, and in their case the rates are as follows:

Upon annual profits up to \$500,000, a rate of 3 per cent.

On the excess above \$500,000 up to \$1,000,000, a rate of 5 per cent.

On the excess above \$1,000,000, a rate of 8 per cent.

* Thanks are due to the Director, Bureau of Mines, Quebec, for kindly furnishing the information from which this statement was compiled.

† The term "minerals" for this purpose does not include building stone and stone used for sculpture, limestone, calcite used as flux, millstones and grindstones, sand and gravel for building purposes, gypsum, common clay used for building purposes, firebrick, pottery, ceramic substances, marl, ochres, mineral waters, soapstone, infusorial earths or tripoli, fuller's earth and peat when such minerals are found separate from other substances in the lands of private persons.

As a means of alleviation the provisions of the above paragraph covering duties on asbestos mines were amended during the legislative session of 1931 and the duties collectable for the years 1931 and 1932 only upon the annual profits from asbestos mines were made the same as for all other mines. This relief was subsequently extended to the years 1933 and 1934.

Profits are ascertained by the method described under Nova Scotia (*see p 59*)

Export Duties

The duties on profits mentioned above may be trebled in the case of any ore minerals and mineral bearing substances coming from mines within the province and being removed outside the province to be treated without first obtaining permission. Otherwise export duties are determined by the Dominion Government (*see p 57*)

Rents under Mining Leases

Mining rights in properly registered claims pay an annual fee of \$10 plus a yearly rental of 50 cents per acre, but during a period of production pay a yearly rental of \$1 per acre. Mining rights can also be obtained in fee simple by paying \$5 per acre for superior minerals and \$3 per acre for inferior minerals. The latter include building materials and products of little value, such as peat bog ore ochre clay marl sand gravel, mineral water and building stones such as limestone sandstone, or granite.

Oil and natural gas Annual rent for a long term or special licence is 25 cents per acre.

Period and Renewal of Mining Leases

Oil and natural gas licences are issued for a term of 10 years, and are renewable in 10 year periods at the same annual rental (25 cents per acre).

Mining rights See under Rents above

ONTARIO*

All mining lands were originally the property of the Crown but since about 1865 they have been sold to private individuals or companies. For more than 20 years substantially the same law has existed whereby anyone who wishes to acquire land belonging to the province for mining purposes may stake a claim of 40 acres and do certain assessment work and then purchase it at a maximum price of \$3 per acre.

* Thanks are due to the Mine Assessor Department of Mines Ontario for kindly furnishing the information from which this statement was compiled.

For many years certain Crown patents contained reservations of mines and minerals, but in the case of lands patented prior to 6th May, 1913, the mines and minerals are now deemed to have passed from the Crown to the patentee, and every reservation thereof contained in the letters patent or by statute is void, and in the case of lands patented since then mines and minerals pass to the patentee unless expressly reserved by letters patent

Amount of Royalties and their Assessment

There are no royalties, except in the case of natural gas, but the Provincial Government levies duties on the profits of mining operations based on the value of the ore at the pit's mouth. From this amount the expenses enumerated in the Mining Tax Act are deducted to give the taxable profit. These deductions are the same as those detailed under Nova Scotia (*see p 59*)

When the annual profits ascertained as above exceed \$10,000, the tax is as follows

On the excess of annual profits of such mine above \$10,000 and up to \$1,000,000, 3 per cent

On the excess above \$1,000,000 and up to \$5,000,000, 5 per cent

On the excess above \$5,000,000, 6 per cent

Natural gas This is subject to a tax of 2 cents for every 1,000 cu ft flowing, drawn, or produced by the well and used by the producer or delivered to the consumer or distributor of such natural gas, but natural gas used for ordinary domestic purposes by the owner or occupier of the land on which the well producing the same is situate, or so used by two or more persons from a well jointly sunk by them for their own use on land owned by one or more of them, shall not be subject to such tax, except where the same exceeds \$5 in amount. A rebate of 75 per cent of the tax is allowed if the gas is consumed in Canada

Export Duties

These are determined by the Dominion Government (*see p 57*)

All lands, claims or mining rights leased, patented or otherwise disposed of under the Mining Act on or after the 12th April, 1917, are subject to the condition that all ores or minerals raised or removed therefrom shall be treated and refined within the Dominion of Canada, so as to yield refined metal or other product suitable for direct use in the arts without further treatment, but this condition does not apply to iron ore

The Lieutenant Governor in Council may exempt any lands, claims, or mining rights from the operation of this condition for such period of time as to him may seem proper

Rents under Mining Leases

Coal petroleum natural gas and salt (on land open for prospecting on those portions of the province lying north and west of the River Mattawan Lake Nipissing and the French River) \$1 per acre per annum

Mining leases (under Forest Reserves Act) \$1 per acre per annum for first year and 25 cents per acre for each subsequent year during the first 10 years

Dredging leases Not less than 25 cents per acre per annum

Period and Renewal of Mining Leases

Coal petroleum natural gas and salt (on land open for prospecting in those portions of the province lying north and west of the River Mattawan Lake Nipissing and the French River) Leases are issued for a term of 10 years with the right of renewal for a further term of 10 years and the second renewal for a further 20 years at such renewal rental as may then be agreed upon or provided by statute.

Mining leases (made under the Forest Reserves Act) Leases are issued for a first term of 10 years and renewals are made for 10 year periods the rent for renewal periods being 10 cents per acre per annum

Dredging leases Issued for a first term of 10 years and renewable for not more than 10 years

MANITOBA*

The province of Manitoba was separated from the Northwest Territories in 1870 and became a province, but the lands included in the new province as well as those left in the Territories were defined as Dominion lands by the Dominion Lands Act, 1872. The right to explore for mines or minerals on any of the Dominion lands, surveyed or unsurveyed, and not then marked or staked out and claimed or occupied, was set out in that Act, and (subject to certain conditions and to the power to withdraw lands from sale in case they proved to be rich in minerals and to institute in lieu thereof a system of leases reserving a royalty payable to the Crown) the explorer could purchase the land.

By that Act it was provided that no reservation of gold silver, iron, copper, or other mines or minerals was to be inserted in any patent from the Crown granting any portion of the Dominion lands, but the rights to gold and silver, as 'Royal metals' did not pass in the patent except where expressly conveyed in such grant.

* Thanks are due to the Director, Mines Branch Department of Mines and Natural Resources, Manitoba for kindly furnishing the information from which this statement was compiled.

As the result of much intervening legislation, the position reached in 1914 was that all mineral claims in Manitoba, for which entry was granted on or before 11th June, 1914, have for their final title a Crown patent, and all mineral claims for which entry was granted on or after 12th June, 1914, have for their final title a lease

Under the administration of the Dominion of Canada there were in Manitoba

- 1 Lands the grant for which conveyed both surface and mineral rights, except for gold and silver

- 2 Lands for which only surface rights were conveyed in the grant mineral rights being open to prospecting

- 3 Lands granted as mining lands for which the grant conveyed both mining and surface rights The mining rights might include gold and silver

- 4 Mining rights leased, but surface rights not included, though these could be obtained by special lease

The mineral resources of Manitoba continued until 15th July, 1930 under the control of the Dominion of Canada, but with the transfer of the natural resources to Manitoba in 1930 as a result of the Transfer of Natural Resources Agreement of that year, the province became owner and administrator of all Crown lands within her borders except Indian lands Since the transfer, titles issued to other than mineral lands and to what are now Crown lands in the right of the province of Manitoba reserve to the Crown the mines and minerals together with the right of operation to excavate such minerals The province, however did in the transfer of the natural resources agree to carry out the contracts made by the Dominion of Canada

Amount of Royalties and their Assessment

At present no royalties are levied, but there is a tax on profits exceeding \$10,000 in any calendar year, calculated in the following manner

Up to \$1,000 000 the tax is 3 per cent

Between \$1,000 000 and \$5,000,000 the tax is 6 per cent

On the excess above \$10,000,000, a proportional increase of 1 per cent for each additional \$5,000,000

Export Duties

These are determined by the Dominion Government (*see p 57*) Section 9 of the Mines Act of Manitoba requires that ores or minerals mined in the province are to be treated and refined in Canada so as to yield a refined metal or other product suitable for direct use in the arts without further treatment, but the Lieutenant Governor in Council has power to exempt any lands from the operation of this section

Rents under Mining Leases

Mineral claim At the rate of \$1 per acre, provided the claim does not exceed the maximum area of 51 65 acres Minimum rental, \$5

Quarrying location * Not less than \$1 per acre per annum

Petroleum, oil shale, natural gas, coal, or salt Not less than \$1 per acre per annum

Rents are payable in addition to royalties

Period and Renewal of Mining Leases

Mineral claim leases These are issued for a term of 21 years, and are renewable for a like period subject to the satisfaction of the Government The rental on such renewal is at the rate of \$2 per acre per annum

Petroleum oil shale, natural gas, coal, or salt Leases are issued for a first term of 21 years, and may be renewed for a further term at such a rental as may be agreed upon or provided by statute or regulations

SASKATCHEWAN†

All minerals in the province are the property of the Crown by virtue of statutes, imperial, national, and provincial, so declaring

ago These grants were absolute and free from royalty

The British North America Act, 1867, 30 Vic, Chap 3, provided (Section 109) that all lands mines, minerals, and royalties shall belong to the several provinces The area now comprised by the province of Saskatchewan was then a part of the Northwest Territories, and it was provided by the Saskatchewan Act, 4 5 Edward VII, Chap 42, that the lands and minerals should be continued to be administered by the Dominion Government and a subsidy in lieu thereof given to the new province The minerals in this ny, but had been of the Dominion Chap 105)

By the Transfer of Natural Resources Agreement of 20th March, 1930, ratified by Imperial and National Governments and declared by Chap 87, Statutes of Saskatchewan, 1930, it is provided that

* For granite, limestone, marble, slate or any building stone, clay, gravel, gypsum, marl, peat, sand or volcanic ash

† Thanks are due to the Deputy Minister of Natural Resources Saskatchewan, for kindly furnishing the information from which this statement was compiled.

the interest of the Crown in all Crown lands, mines, minerals, and royalties shall belong to the province. The Mineral Resources Act, Chap 18, Statutes of Saskatchewan, 1931, provides for the disposition of such Crown rights

Amount of Royalties and their Assessment

Coal The only grade of coal so far mined is lignite, upon which the royalty is 5 cents per ton (2,000 lb). When mined under "sale" the royalty is 7 cents per ton. "Sale" means coal rights which were sold and for which a permanent title has been given.

Petroleum and natural gas For a period of 5 years after the date upon which the Minister may decide that oil in commercial quantity has been discovered, the royalty to be collected shall not exceed 5 per cent of the sales of the products, nor shall it be less than $2\frac{1}{2}$ per cent of such sales. For a further period thereafter of 5 years the royalty shall not exceed 10 per cent, nor shall it be less than 5 per cent, and thereafter the royalty shall be 10 per cent.

Base and precious metals Royalties on minerals* are based on profits on the same scale as that in force in Nova Scotia (see p 59).

Volcanic ash, slate, marble, gypsum, sand, gravels, clays, and other quarryable elements Royalties in respect of these minerals have not yet been fixed.

Sodium sulphate $12\frac{1}{2}$ cents per ton, but if the lessee can establish to the satisfaction of the Minister that this royalty exceeds $12\frac{1}{2}$ per cent of the selling value of the salts or brine in their natural unrefined state, royalty may be collected at the rate of $12\frac{1}{2}$ per cent of such selling price, in the discretion of the Minister. On products shipped in solution from the location leased, a royalty of 2 cents per gallon is levied in lieu of the above.

Royalties are payable in addition to rents (see below)

Export Duties

These are determined by the Dominion Government (see p 57)

All grants and leases issued under the Regulations for the Disposal of Quartz Mining Claims on Dominion Lands are subject to the provision that all ores and minerals mined from such locations shall be treated and refined in Canada so as to yield a refined metal or other product suitable for direct use in the arts without further

* According to the Quartz Mining Regulations, 1927, the term "mineral" means all deposits of gold, silver, and all naturally occurring useful minerals other than placer deposits, peat, coal, petroleum, natural gas

"portion of the agricultural surface of the land, shall not be considered as mineral within the meaning of these Regulations

treatment The Lieutenant Governor in Council may exempt any lands claims or mining rights from the operation of this condition for such period of time as to him may seem proper

Rents under Mining Leases

Coal \$1 per acre per annum

Petroleum and natural gas 50 cents per acre for the first year and \$1 per acre per annum for the next 21 years

Base and precious metals (under the Quartz Mining Regulations) Rental for a period of 21 years, \$50 In the case of large claims for iron and mica mining, the rental is \$150 for the period of 21 years

Quarry products (e.g., gypsum, slate, marble, etc.) \$1 per acre per annum

Placer claim \$10 per claim per annum Creek and river claims are 500 and 1,000 ft. along the length of the creek or river respectively

Sodium sulphate The annual rent of a licence to work sodium sulphate is 25 cents per acre

Period and Renewal of Mining Leases

Coal Leases are issued for a first term of 21 years renewable for further terms each of 21 years

Oil and natural gas If the location described in any lease issued under the provisions of the Petroleum and Natural Gas Regulations shall yield oil in paying quantity the lessee shall pump and work the wells faithfully and uninterruptedly with due vigour and skill, with good and sufficient machinery and appliances in accordance with the provisions of the Regulations and to the satisfaction of the Minister, so long as the said wells continue to yield oil in remunerative quantity

Base and precious metals Licences are issued under the Quartz Mining Regulations for a term of 21 years and are renewable for further periods of 21 years In the case of the first renewal the rent for the period is \$200 In the case of large claims for iron and mica mining the rental for the renewal period of 21 years is \$600

ALBERTA

All Crown lands mines and minerals and royalties incident thereto are administered by the Government of Canada The leasing or disposal of mining lands or mining rights is therefore administered under Dominion Laws and Regulations

Amount of Royalties and their Assessment

Coal 5 cents per ton (2,000 lb)

Petroleum and natural gas For a period of 5 years after the date upon which the Minister may decide that oil in commercial quantity has been discovered, the royalty to be collected shall not exceed 5 per cent of the sales of the products, nor shall it be less than 2½ per cent of such sales. For a further period thereafter of 5 years the royalty shall not exceed 10 per cent, nor shall it be less than 5 per cent and thereafter the royalty shall be 10 per cent.

Base and precious metals Royalties on minerals* are based on profits according to the scale in force in Nova Scotia (see p 59)

I olcanic ash, slate, marble, gypsum, sand, gravels, clays, and other quarryable elements Royalties in respect of these minerals have not yet been fixed

Sodium sulphate The royalty is the same as that given under Saskatchewan (see p 68)

Export Duties

These are determined by the Dominion Government (see p 57), but at present no export duties are levied on minerals

All grants and leases issued under the Regulations for the Disposal of Quartz Mining Claims on Dominion Lands are subject to the provision that all ores and minerals mined from such locations shall be treated and refined in Canada so as to yield a refined metal or other product suitable for direct use in the arts without further treatment. The Lieutenant Governor in Council may exempt any lands, claims or mining rights from the operation of this condition for such period of time as to him may seem proper

Rents under Mining Leases

Coal \$1 per acre per annum

Petroleum and natural gas 50 cents per acre for the first year and \$1 per acre per annum for the next 21 years

Base and precious metals (under the Quartz Mining Regulations) Rental for a period of 21 years, \$50. In the case of large claims for iron and mica mining the rental is \$130 for the period of 21 years

* According to the Quartz Mining Regulations, 1929, the term " mineral " means all deposits of gold, silver, and all naturally occurring useful minerals other than placer deposits, peat, coal, petroleum, natural gas, bitumen and oil shales. Limestone, marble, clay, gypsum, or any building stone when mined for building purposes, earth ash, marl, gravel, sand as well as any element which may in the opinion of the Minister form a portion of the agricultural surface of the land, are not considered as minerals within the meaning of these Regulations

Quarry products (e.g., gypsum, slate, marble, etc.) Rates have not yet been fixed

Placer claims \$10 per claim per annum Creek and river claims are 500 and 1,000 ft respectively along the length of the creek or river respectively

Sodium sulphate The annual rent on a licence to work sodium sulphate is 25 cents per acre

Period and Renewal of Mining Leases

Coal Leases are issued for a first term of 21 years, renewable for further terms each of 21 years

Oil and natural gas If the location described in any lease issued under the provisions of the Petroleum and Natural Gas Regulations shall yield oil in paying quantity, the lessee shall pump and work the wells faithfully and uninterruptedly with due vigour and skill, with good and sufficient machinery and appliances in accordance with the provisions of the Regulations and to the satisfaction of the Minister, so long as the said wells continue to yield oil in remunerative quantity

Base and precious metals Licences are issued under the Quartz Mining Regulations for a term of 21 years and are renewable for further periods of 21 years In the case of the first renewal the rent for the period is \$200 In the case of large claims for iron and mica mining the rental for the renewal period of 21 years is \$600

BRITISH COLUMBIA*

Crown lands in the province of British Columbia are controlled, both as to surface and under surface rights by the Crown in right of the province Minerals in Canadian National Parks within the province have been subjected to Dominion Park Regulations, which prohibit mining inside the limits of such parks

Any person who is holder of a Free Miner's Certificate (*see Rents below*) is entitled to enter upon all lands of the Crown, and upon any other lands on which the right to so enter is not specifically reserved, for the purpose of prospecting for minerals locating claims and mining Before entry on lands the surface of which has been alienated with reservation by the Crown of under surface rights, security must be given for any possible damage or loss sustained through operations

Amount of Royalties and their Assessment

Coal or coke 10 cents per ton (2 000 lb) is levied the coal used in making coke being ignored for the purposes of royalty which is levied on the final coke product

* Thanks are due to the Deputy Minister of Mines and the Provincial Mineralogist, British Columbia, for kindly furnishing the information from which this statement was compiled.

Amount of Royalties and their Assessment

Coal 5 cents per ton (2,000 lb)

Petroleum and natural gas For a period of 5 years after the date upon which the Minister may decide that oil in commercial quantity has been discovered, the royalty to be collected shall not exceed 5 per cent of the sales of the products, nor shall it be less than $2\frac{1}{2}$ per cent of such sales For a further period thereafter of 5 years the royalty shall not exceed 10 per cent , nor shall it be less than 5 per cent , and thereafter the royalty shall be 10 per cent

Base and precious metals Royalties on minerals* are based on profits according to the scale in force in Nova Scotia (see p 59)

Volcanic ash, slate, marble, gypsum, sand, gravels, clays, and other quarryable elements Royalties in respect of these minerals have not yet been fixed

Sodium sulphate The royalty is the same as that given under Saskatchewan (see p 68)

Export Duties

These are determined by the Dominion Government (see p 57), but at present no export duties are levied on minerals

All grants and leases issued under the Regulations for the Disposal of Quartz Mining Claims on Dominion Lands are subject to the provision that all ores and minerals mined from such locations shall be treated and refined in Canada so as to yield a refined metal or other product suitable for direct use in the arts without further treatment The Lieutenant Governor in Council may exempt any lands, claims or mining rights from the operation of this condition for such period of time as to him may seem proper

Rents under Mining Leases

Coal \$1 per acre per annum

Petroleum and natural gas 50 cents per acre for the first year and \$1 per acre per annum for the next 21 years

Base and precious metals (under the Quartz Mining Regulations) Rental for a period of 21 years, \$50 In the case of large claims for iron and mica mining, the rental is \$130 for the period of 21 years

* According to the Quartz Mining Regulations, 1929, the term ' mineral ' means all deposits of gold, silver, and all naturally occurring useful minerals.

† Some portion of the agricultural surface of the land, are not considered as minerals within the meaning of these Regulations

Quarry products (e.g., gypsum slate marble, etc.) Rates have not yet been fixed

Placer claims \$10 per claim per annum Creek and river claims are 500 and 1 000 ft respectively along the length of the creek or river respectively

Sodium sulphate The annual rent on a licence to work sodium sulphate is 25 cents per acre

Period and Renewal of Mining Leases

Coal Leases are issued for a first term of 21 years renewable for further terms each of 21 years

Oil and natural gas If the location described in any lease issued under the provisions of the Petroleum and Natural Gas Regulations shall yield oil in paying quantity the lessee shall pump and work the wells faithfully and uninterruptedly with due vigour and skill with good and sufficient machinery and appliances in accordance with the provisions of the Regulations and to the satisfaction of the Minister so long as the said wells continue to yield oil in remunerative quantity

Base and precious metals Licences are issued under the Quartz Mining Regulations for a term of 21 years and are renewable for further periods of 21 years In the case of the first renewal the rent for the period is \$200 In the case of large claims for iron and mica mining the rental for the renewal period of 21 years is \$600

BRITISH COLUMBIA*

Crown lands in the province of British Columbia are controlled both as to surface and under surface rights by the Crown in right of the province Minerals in Canadian National Parks within the province have been subjected to Dominion Park Regulations which prohibit mining inside the limits of such parks

Any person who is holder of a Free Miner's Certificate (*see Rents below*) is entitled to enter upon all lands of the Crown and upon any other lands on which the right to so enter is not specifically reserved for the purpose of prospecting for minerals locating claims and mining Before entry on lands the surface of which has been alienated with reservation by the Crown of under surface rights security must be given for any possible damage or loss sustained through operations

Amount of Royalties and their Assessment

Coal or coke 10 cents per ton (2 000 lb) is levied the coal used in making coke being ignored for the purposes of royalty which is levied on the final coke product

* Thanks are due to the Deputy Minister of Mines and the Provincial Mineralogist British Columbia for kindly furnishing the information from which this statement was compiled.

Petroleum A royalty of 24 cents per barrel (35 Imperial galls) is levied on crude petroleum raised or gotten

Iron ore 10 cents per ton of black sand won from any ground held as a leasehold under the Iron Placer Act

Precious metals (gold, silver and the platinum metals) 2 per cent *ad val* when the value of the annual output exceeds \$5,000

Phosphate rock 10 cents per ton (2,000 lb)

Other minerals * All ores and mineral substances mined in the province are subject to an *ad val* tax of 2 per cent when the value of the output exceeds \$5 000 per annum This also applies to placer mines

In the case of the land grant on Vancouver Island made to the Esquimalt and Nanaimo Railway Co., the railway administers the base metals while the Government administers the precious metals

The following are the royalties levied by the Railway Co on base metals

Iron ore (material containing over 40 per cent metallic iron and manganese) 1 cent per unit of iron plus manganese on total contents with a minimum royalty of 25 cents per ton

Lead ore $\frac{1}{16}$ cent per pound upon the lead content of the ore

Zinc ore $\frac{3}{16}$ cent per pound upon the zinc content for the first 40 units, $\frac{1}{16}$ cent per pound upon the zinc content in excess of 40 units

Copper ore $\frac{1}{16}$ cent per pound upon copper content up to and including 2 per cent of copper content upon the first 1 per cent in excess of 2 per cent of copper content, $\frac{1}{16}$ cent per pound upon the first 1 per cent in excess of 3 per cent of copper content, $\frac{1}{8}$ cent per pound of copper content, upon the first 1 per cent in excess of 4 per cent of copper content, $\frac{1}{4}$ cent per pound of copper content, upon any copper content exceeding 5 per cent copper content, $\frac{1}{16}$ cent per pound upon such excess

Other ores and concentrates 2 per cent of the gross value of ores or concentrates not otherwise specified

Rents under Mining Leases

Mineral leases The granting of mineral leases is not part of the scheme of the Mineral Act, the Crown grants thereunder being in fee simple Any person over the age of eighteen and any joint stock company may obtain a Free Miner's Certificate upon payment of the required fee which in the case of an individual is \$5 for one year, and to a joint stock company having a capital of \$100,000 or less is \$50, if capitalized beyond this, the fee is \$100 The

* *Minerals* according to the Mineral Act, include gold, silver, platinum metals, most ores and non metallic minerals but coal, petroleum, natural gas, limestone clay and building stones are excluded

certificate entitles the holder to enter upon all waste lands of the Crown, and upon any other lands where the minerals other than coal are reserved to the Crown and its licensees (with specified reservations), for the purpose of prospecting for minerals, locating claims, and mining. A free miner can only hold by location one mineral claim on the same vein or lode, but may acquire others by purchase. Under the Placer Mining Act a free miner may locate one placer claim or leasehold in his own name, and one placer claim or leasehold for each of two free miners for whom he acts as agent, on any separate creek, river bed, bar, or dry diggings. Other placer claims or leaseholds may be acquired by purchase.

Coal, petroleum and natural gas 15 cents per acre per annum.

Phosphate rock 15 cents per acre per annum

Placer mining Ordinary leases, 80 acres in extent, pay an annual rental of \$30. Annual development work is required to the value of \$250.

Dredging leases Not over 5 miles in length, rental \$25 per mile, annual development work is required to the value of \$1,000 per mile.

Period and Renewal of Mining Leases

Coal, petroleum and natural gas The lessee during the term of his lease is entitled, subject to his fulfilment of the terms of his lease, to purchase the lands, including the coal, petroleum, and natural gas contained thereunder, outright for a sum of \$20 per acre. Leases are renewable for terms of 3 years each on payment of a fee of \$100 for each renewal on an area of 640 acres.

Black sand mining (under the Iron Placer Act) Leases are issued for a maximum term of 25 years and may be extended.

Placer mining Leases which may be for placer mining purposes or for precious stones only are issued for a first term not exceeding 20 years and may be extended.

Phosphate rock Leases may be issued for a term of 5 years, renewable for two periods of 3 years each.

NORTHWEST TERRITORIES*

The title issued for Dominion lands, the property of the Federal Government in the Northwest Territories, reserves to the Crown the mines and minerals which may be found on or under such lands, together with the rights of operation.

* Thanks are due to the Director of Lands, Northwest Territories and Yukon Branch, for assistance given in the preparation of this statement.

Amount of Royalties and their Assessment

Coal 5 cents per ton (2,000 lb) on the merchantable output

Petroleum and natural gas Royalty may be charged at the rate of 10 per cent on the value of oil produced On natural gas used for the production of carbon black a royalty of 5 per cent on the value of the gas at the point of production may be levied

Minerals * The annual royalties payable on the profits of any mine acquired under the Quartz Mining Regulations, when these exceed \$10,000 during any calendar year, are on the same scale as those in force in Nova Scotia (*see* p 59), the profits being ascertained in the same manner

Alkali mining 25 cents per ton (2,000 lb) on shipping weight on all products, raw or refined, taken from the property leased, provided that if the lessee can establish to the satisfaction of the Minister that royalty at the above rate of 25 cents per ton exceeds $12\frac{1}{2}$ per cent of the selling value of the salts or brine in their natural state, but not refined royalty may be collected at the rate of $12\frac{1}{2}$ per cent of such selling price, in the discretion of the Minister, when the product shipped from the location leased is in solution, the royalty is 2 cents per gallon

Potash Royalty not to exceed $2\frac{1}{2}$ per cent of the sales of the products of a location acquired under the provisions of the Potash Regulations 1916

Quarry products Royalty may be charged, but none is collected at present

River gravel, sand and stone A fee of 1 cent per cu yd in excess of 1,000 cu yds included in any one permit is levied on gravel, sand, and stone removed from river beds the property of the Crown in the Territory

Dredging $2\frac{1}{2}$ per cent of the value of the product of the location after it exceeds \$10,000

Export Duties

These are determined by the Dominion Government (*see* p 57) No export duties are levied on coal, oil, or minerals, but all grants and leases issued under the provisions of the Quartz Mining Regulations are subject to the provision that all ores or minerals mined from locations described in such grants or leases shall be treated and refined within the Dominion of Canada so as to yield refined metal or other product suitable for direct use in the arts without further treatment The Lieutenant Governor in Council has power to exempt lands from the operation of this condition

Iron ores produced in excess of smelter requirements from locations situated on any of the islands of Hudson Bay in the Northwest Territories may, however, be exported for treatment

* *Minerals* See footnote, p 70

Rents under Mining Leases

Coal \$1 per acre per annum

Mineral lease For the entire period of the lease, \$50 per claim of 51 65 acres, plus \$5 per acre for all land in excess of this area

Alkali mining lease 25 cents per acre per annum

Potash mining lease 25 cents per acre for the first year and 50 cents per acre for each subsequent year

Quarrying lease \$1 per acre per annum

Limestone, granite, slate, marble, gypsum, marl, gravel, sand, clay, volcanic ash, or building stone \$1 per acre per annum

Dredging lease \$50 for each mile of river for the first year and \$10 per mile for each subsequent year

Period and Renewal of Mining Leases

Coal, oil and natural gas, dredging, limestone, gypsum, clay, sand, and building materials Leases are issued for a term of 21 years, and renewable for a further term of 21 years subject to compliance with the terms of the lease

Mineral leases are issued for a term of 21 years, and are renewable for further periods of 21 years each. For a renewal the lessee pays a fee, in advance of \$200 to cover the rental for a further period of 21 years, and for excess area at the rate of \$20 per acre. For the rental of a claim containing an area of 160 acres acquired under the provisions of Section 21 of the Quartz Mining Regulations the rental is \$150 for the first period of 21 years and a rental of \$600 for a renewal period of like duration. If the claim contains more than 160 acres payment for the excess area is at the rate of \$5 per acre for the first period of 21 years and \$20 per acre for the second period.

YUKON*

The title issued for Dominion lands, the property of the Federal Government in Yukon territory reserves to the Crown the mines and minerals which may be found on or under such lands together with the right of operation

Amount of Royalties and their Assessment

A tax is levied on the profits of any mine in the territory acquired under the provisions of the Yukon Quartz Mining Act which exceed

* Thanks are due to the Chairman Dominion Lands Board Ottawa and the Director of Lands the Northwest Territories and Yukon Branch Dominion Lands Administration for kindly furnishing the information from which this statement was compiled

the sum of \$10,000 in any calendar year. The rates on minerals* (excluding coal, petroleum, natural gas, gold, alkali mining products and potash) are the same as those in force in Nova Scotia (*see* p 59).

The allowances which are made in assessing these royalties are the same as those in force in Nova Scotia.

Coal 5 cents per ton (2 000 lb) on the merchantable output of a mine

Petroleum and natural gas According to Order in Council, 29th October 1920, for a period of 5 years after the date upon which the Minister of the Interior may decide that oil in commercial quantity has been discovered on lands acquired under the provisions of the Regulations, the royalty to be collected by the Crown shall not exceed 5 per cent of the output or 5 per cent of the sales of the products of locations so acquired, as may be decided by the Minister nor shall it be less than $2\frac{1}{2}$ per cent of such sales during that period. For a further period thereafter of 5 years, the royalty to be collected shall not exceed 10 per cent of the sales of the products of locations, nor shall it be less than 5 per cent of the sales during that period, and thereafter the royalty shall be 10 per cent of the sales of the products of locations acquired under the provisions of the Regulations.

Gold On all gold obtained from alluvial locations acquired under the Yukon Placer Mining Act and shipped from the territory a royalty is levied of 2 $\frac{1}{2}$ per cent of its value or at such less rate as may be fixed by the Governor in Council.

The gold for the purpose of estimating such royalty is valued at \$15 per oz.

Potash and alkali mining Royalty is payable at the same rate as in Northwest Territories (*see* p 74).

Rents under Mining Leases

Coal \$1 per acre per annum

Petroleum and natural gas 50 cents per acre for the first year and \$1 per acre for each subsequent year

Potash mining 25 cents per acre for the first year and 50 cents per acre for each subsequent year

Alkali mining 25 cents per acre per annum

Dredging \$100 per mile of river leased for the first year and \$10 per mile for each subsequent year

The Governor in Council may by Regulation, upon the report of the Minister that due to the market price of metals and other general conditions over which the owners of mineral claims exercise no

* Limestone, marble, clay, gypsum, building stones, marl, gravel and sand do not appear to be subject to this tax.

control, the margin of profit which might reasonably be derived from the efficient and economical operation of such claims has, in the opinion of the Minister, been practically eliminated, or for any other reason which to the Minister may appear to be sufficient, grant such relief as to the annual representation work or payment in lieu thereof as may be necessary under the circumstances. All Regulations made under this section shall be laid before both Houses of Parliament within the first 15 days of the session next after the date thereof.

Period and Renewal of Mining Leases

Mineral, iron, and mica claim leases issued under the Yukon Quartz Mining Act are for a term of 21 years, renewable for further terms each of 21 years.

Dredging leases are issued for a term of 15 years, and may be renewed.

NEWFOUNDLAND*

Mineral rights have been granted to several companies holding land rights (e.g., the Reid Newfoundland Co. and the Anglo Newfoundland Development Co.), but the rights over the remaining land belong to the Crown except where a grant has been made in fee simple (see Rents below).

Amount of Royalties and their Assessment

Minerals † According to the Crown Lands Act, 1930, a royalty is payable to the Government of 5 per cent. of the profits obtained by the sale of minerals won on Crown lands or on lands in which the mineral rights have been reserved to the Crown.

For the purpose of ascertaining the net profits mentioned in the preceding clause there shall be deducted from the gross price which has been received by the said holder or grantee for the minerals sold during the year the following items:

* Thanks are due to the Trade Commissioner for Newfoundland, in London, for kindly furnishing the information from which this statement was compiled.

† "Minerals," by definition, mean all valuable deposits of gold, silver, platinum, iridium, or any of the platinum group of metals, mercury, lead, copper, iron, tin, zinc, nickel, aluminium, antimony, arsenic, barium, bismuth, boron, bromine, cadmium, chromium, cobalt, iodine, magnesium, manganese, molybdenum, phosphorus, plumbago, potassium, sodium, strontium, sulphur (or any combination of the aforementioned elements, with themselves or with any other elements), asbestos, emery, mica and mineral pigments. Limestone, marble, clay, or any building stone are not considered as minerals within the meaning of this Act.

(a) The amount of all wages and salaries to workmen employed in or in connection with the said mining operations

(b) A sum equivalent to 10 per cent per annum of the actual cost of all buildings, shafts, engines, machinery, gear, tools, rails, wagons and other plant and effects of every description used in or in connection with the mines

(c) The cost of insuring and keeping insured all buildings, shafts, engines, machinery, gear, tools, rails, wagons, and other plant and effects aforesaid

(d) All taxes, rates, assessments, and duties payable to the Government and any local authority

(e) All costs and expenses of every kind which may be incurred in operating or repairing the property, and all costs and expenses of storage, freight, export duties, and harbour, dock, and other dues paid by the said holder or grantee

Any dispute arising under this section between the Minister and the said holder or grantee shall be determined by the Auditor General of the Colony, whose decision shall be final and binding upon both parties

Agreements made in 1932-33 between the Governor in Council and certain persons regarding mineral concessions in *Labrador* provided for the payment of the following royalties on minerals

Coal 12½ cents per ton

Iron 5 cents per ton of ore sold or smelted

Copper 4 cents per ton for each 1 per cent of copper in the ore smelted or sold

Lead 2 cents per ton for each 1 per cent of lead in the ore smelted or sold

Zinc 2 cents per ton for each 1 per cent of zinc in the ore smelted or sold

Other metals and minerals.

On the annual profits in excess of \$10,000 up to \$5,000,000 the royalty is 5 per cent

On the annual profits in excess of \$5,000,000 up to \$10,000,000 the royalty is 6 per cent

On the annual profits in excess of \$10,000,000 the royalty is 7 per cent

Rents under Mining Leases

Mining claim The holder of a mining claim having complied with the requirements of the Crown Land Act, 1930, is entitled to a grant in fee simple for the claim

Coal, petroleum, natural gas and salt \$5 per acre per annum

Quarries (for limestone, granite, slate, marble, gypsum, marl, clay, building stone or volcanic ash) Not less than \$5 per acre per annum for Crown lands

Dredging leases Not less than \$20 per mile of river, stream or lake

Period and Renewal of Mining Leases

Mining claims (See above)

Coal, petroleum, natural gas and salt leases which are issued for a first term of 10 years may be renewed for a further term of 10 years at such rental as may be agreed upon or provided by Regulations

Quarries Leases may be granted for a period of not more than 99 years. Every holder of a lease for quarrying purposes who satisfies the Governor in Council that he has within 5 years from the date of his lease, *bona fide* expended in quarrying on the land of his lease the sum of \$6,000 shall be entitled to a grant of the land in fee simple

Dredging leases These are issued for a first term of 10 years, and are renewable for a further period of 10 years

BRITISH GUIANA*

The ownership of all minerals and metals on any land granted after the passing of the Mining Ordinance, 1903, is vested in the Crown

The ownership of all metals other than gold, silver and precious stones is vested in the owner of private lands granted before the passing of the Mining Ordinance, 1903, and he is entitled to mine for and when found to take and appropriate them to his own use without previously obtaining any licence. He is also entitled to take and appropriate any metal (other than gold or silver) contained in any valuable mineral in or on his land which has been separated from the gold or silver by the licensee, unless the latter purchases the metal from the owner at an agreed price

The owner of private lands granted prior to the passing of the Mining Ordinance, 1903 is also entitled, without obtaining a licence, to mine for and appropriate any mineral found in or on his lands which contains gold or silver together with some other metal, provided that the gold or silver or both contained is not of greater value than the cost of obtaining it or them alone therefrom but has no right or claim to any precious stones found on such lands

* Thanks are due to the Commissioner of Lands and Mines, British Guiana, for kindly furnishing the information from which this statement was compiled

Powers are vested in the Commissioner of Lands and Mines, subject to the approval of the Governor and the above provision, to issue a licence to any person authorizing him to enter on private land and there search and mine for gold, silver valuable minerals and precious stones or other metals or minerals, and in the case of private lands granted after the commencement of the Mining (Mineral Oil) Ordinance 1910 mineral oil, asphalt, coal or other substance of a like nature. Similar powers are vested in the Commissioner in regard to lands owned by the Colony.

Amount of Royalties and their Assessment

Oil 72 cents per ton of the net crude oil received into the licensee's field storage tanks or reservoirs after deducting water and foreign substances.

No royalty is payable on any casing head petroleum spirit obtained nor on oil or natural gas used for drilling.

If the royalties are payable half yearly, then if in any half year beginning with that for which the first payment of the certain half yearly rent is made the lessees shall not win or get from or out of the said lands such quantity of crude oil as would produce for that half year the amount of the certain rent hereby reserved then, and in every such case the lessees may in the next succeeding half year of the said term but not afterwards win and get from or out of the said borings such a quantity of crude oil as shall be required to make up the deficiency without paying any royalty for the same other than the said certain rent. But the surplus of any preceding half year or half years shall not come in aid of or be applied to make good the deficiency of any subsequent half year or half years.

Natural gas 4 cents per 1,000 cu ft of natural gas (calculated at an absolute pressure of one atmosphere and at a temperature of 60° F) sold by the licensees.

Bituminous minerals A royalty on a tonnage basis is leviable on all bituminous minerals (other than crude oil) raised, but until some other rate is fixed by the Governor with the consent of the licensees the royalty is fixed at 10 per cent of the actual or assumed value of the bituminous minerals won.

Bauxite If won from Crown lands and exported from the Colony, 10 cents per ton. If won from Crown lands and used for manufacture in the Colony, 2 cents per ton.

Royalty is payable on all bauxite won from the Crown lands and removed to private property, whenever such bauxite is either exported from or used for manufacture in the Colony.

A lessee pays a minimum royalty charge in each year equivalent to the royalty which would be payable if 5 tons of bauxite were exported for each acre leased. Provided always that a lessee shall only be required to pay a minimum royalty charge equivalent to

the royalty on 1, 2, 3 or 4 tons for each acre for the first, second, third and fourth years of the term respectively, and that such minimum royalty charge may be averaged over 5 year periods the first of such periods commencing at the date of the commencement of the term granted by the lease and the subsequent periods following consecutively, so that production upon which royalty in excess of the minimum is paid in any year may be used by the lessee to offset a deficit in any subsequent year within the 5 year period, but no excess of royalty which shall become payable in respect of any former 5 year period shall be taken in account for answering the deficiency of any subsequent 5 yearly period or any year thereof

Gold 50 cents per oz

Silver 4 cents per oz

Precious stones 50 cents per carat

Bort and rubbish (i.e., stones unsuitable for gem purposes) 15 cents per carat

Export Duties

Bauxite $1\frac{1}{2}$ per cent *ad val*

Mineral oil $1\frac{1}{2}$ per cent *ad val*

Natural gas $1\frac{1}{2}$ per cent *ad val*

Gold $1\frac{1}{2}$ per cent *ad val*.

Silver $1\frac{1}{2}$ per cent *ad val*

Precious stones 35 cents per carat

Bort and rubbish 15 cents per carat

Rents under Mining Leases

Oil The rent payable according to acreage is as follows

<i>Area in Acres</i>		<i>Annual Rent</i>
		£
Not exceeding 250		500
Over 250 but not over 500		800
" 500	1,000	1 000
" 1,000	" "	1,500
" 2,000	" "	2 000
" 3 000	" "	2,500
" 5,000	" "	3 300
" 7,000	" "	4 000
" 10,000	" "	5,500
" 14,000	" "	7 000
" 20,000	" "	9 000
" 30,000	" "	10,000

A further yearly rent of 20 cents per acre or part of an acre of land, the surface of which is actually occupied for any of the purposes of the lease, is payable in half yearly instalments

If the royalty payable in respect of any year amounts to or exceeds the sum of the certain rent, the latter is not payable in respect of such year, and if the royalty in respect of any year is less than the amount of the certain rent, the amount payable in respect of such royalty is deducted from the certain rent payable in respect of that year

Mining The annual rent payable under a concession or lease is as follows

Gold, silver and valuable minerals 20 cents per acre

Precious stones 50 cents per acre

Gold, silver, valuable minerals and precious stones. 70 cents per acre

Bauxite 20 cents per acre per annum if under a lease

Kaolin, stone, gravel or clay 20 cents per acre per annum

Dredging (for gold, silver and valuable minerals) 10 cents per acre per annum

The rent for a concession to dredge for gold, silver and valuable minerals and (or) precious stones is 20 cents per acre per annum

Period and Renewal of Mining Leases

Oil Mining leases are issued for a term of 21 years or such longer period as the Secretary of State may approve

A renewal of the lease may be granted for the further term of 21 years, or such further and longer terms as the Secretary of State may approve, at the same surface rent and subject to the same covenants, provisions and agreements other than the covenant for renewal, but subject to the payment by the lessee of such yearly rent and royalty as may be then fixed by the Governor, provided that any increase of the rent shall not exceed 50 per cent of the rent reserved in the lease

BRITISH HONDURAS*

The right to all precious metals, minerals and oil in British Honduras, together with the right to exploit these substances, is reserved to the Crown, except in those cases where such rights have been alienated prior to the passing of the Crown Lands Ordinance, 1924

* Thanks are due to the Surveyor General, British Honduras, for kindly furnishing the information from which this statement was compiled

Of the estimated area of the Colony (5 502 720 acres) some 2 780 863 acres have been alienated the greater part in the early years of the nineteenth century. From all grants previous to the 1st July, 1886, precious metals alone were reserved, since that date coal has also been reserved, since 20th December, 1907, mineral oil has been reserved in addition, and since 4th December, 1929 all minerals, of whatsoever nature they may be, have been reserved.

Amount of Royalties and their Assessment

The following royalties are specified under the General Minerals Regulations, 1932

Oil 50 cents per ton on the net output of crude oil collected into the field tanks, less water and foreign substances. If the net quantity of crude oil received into the lessee's field storage tanks during any complete year exceeds 100,000 tons, a deduction of 12 cents per ton shall be made from the rate of royalty.

Natural gas 2 cents per 1,000 cu ft sold by the licensee

Iron ores or metallic iron 1 per cent of the value

Lead ores or metallic lead 2 per cent of the value of ores with an average silver content of less than 4 oz per ton and an additional 3 per cent of the value of the silver on material containing more than 4 oz

Tin ores and metallic tin When the London price of metallic tin per ton is

Less than £180, the royalty is	2 per cent of the value
£180, but less than £190, the royalty is	3
£190, " " £200, " "	4
£200, " " £220, " "	5
£220, " " £240, " "	6
£240, " " £260, " "	7
£260, " " £280, " "	8
£280, " " £300, " "	9
£300 or upwards,	10

Wolfram When the London price per unit is

Less than 30s, the royalty is	2½ per cent <i>ad val</i>
30s, but less than 35s, the royalty is	3
35s, " " 40s	5½
40s or upwards, the royalty is	7½

Tin wolfram ore For the purpose of computing royalty mixed ore containing both tin and wolfram concentrates if it contains 60 per cent and over of wolfram concentrate is deemed to be wolfram ore, and if it contains less than 60 per cent wolfram concentrate, is deemed to be tin ore. The exporter of such mixed c

A further yearly rent of 20 cents per acre or part of an acre of land, the surface of which is actually occupied for any of the purposes of the lease, is payable in half yearly instalments

If the royalty payable in respect of any year amounts to or exceeds the sum of the certain rent, the latter is not payable in respect of such year, and if the royalty in respect of any year is less than the amount of the certain rent, the amount payable in respect of such royalty is deducted from the certain rent payable in respect of that year

Mining The annual rent payable under a concession or lease is as follows

Gold, silver and valuable minerals 20 cents per acre

Precious stones 50 cents per acre

Gold, silver, valuable minerals and precious stones 70 cents per acre

Bauxite 20 cents per acre per annum if under a lease

Kaolin, stone, gravel or clay 20 cents per acre per annum

Dredging (for gold, silver and valuable minerals) 10 cents per acre per annum

The rent for a concession to dredge for gold silver and valuable minerals and (or) precious stones is 20 cents per acre per annum

Period and Renewal of Mining Leases

Oil Mining leases are issued for a term of 21 years or such longer period as the Secretary of State may approve

A renewal of the lease may be granted for the further term of 21 years, or such further and longer terms as the Secretary of State may approve, at the same surface rent and subject to the same covenants, provisions and agreements other than the covenant for renewal, but subject to the payment by the lessee of such yearly rent and royalty as may be then fixed by the Governor, provided that any increase of the rent shall not exceed 50 per cent of the rent reserved in the lease

BRITISH HONDURAS*

The right to all precious metals, minerals and oil in British Honduras, together with the right to exploit these substances, is reserved to the Crown, except in those cases where such rights have been alienated prior to the passing of the Crown Lands Ordinance, 1924

* Thanks are due to the Surveyor General British Honduras for kindly furnishing the information from which this statement was compiled

A further yearly rent of 20 cents per acre or part of an acre of land, the surface of which is actually occupied for any of the purposes of the lease, is payable in half yearly instalments

If the royalty payable in respect of any year amounts to or exceeds the sum of the certain rent, the latter is not payable in respect of such year, and if the royalty in respect of any year is less than the amount of the certain rent, the amount payable in respect of such royalty is deducted from the certain rent payable in respect of that year

Mining The annual rent payable under a concession or lease is as follows

Gold, silver and valuable minerals 20 cents per acre

Precious stones 50 cents per acre

Gold, silver, valuable minerals and precious stones 70 cents per acre

Bauxite 20 cents per acre per annum if under a lease

Kaolin, stone, gravel or clay 20 cents per acre per annum

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The rent for a concession to dredge for gold, silver and valuable minerals and (or) precious stones is 20 cents per acre per annum

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A renewal of the lease may be granted for the further term of 21 years, or such further and longer terms as the Secretary of State may approve, at the same surface rent and subject to the same covenants, provisions and agreements other than the covenant for renewal, but subject to the payment by the lessee of such yearly rent and royalty as may be then fixed by the Governor, provided that any increase of the rent shall not exceed 50 per cent of the rent reserved in the lease

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Of the estimated area of the Colony (5 502 720 acres) some 2 780 863 acres have been alienated the greater part in the early years of the nineteenth century. From all grants previous to the 1st July, 1886 precious metals alone were reserved, since that date coal has also been reserved since 20th December 1907, mineral oil has been reserved in addition and since 4th December, 1929, all minerals of whatsoever nature they may be, have been reserved.

Amount of Royalties and their Assessment

The following royalties are specified under the General Minerals Regulations 1932

Oil 50 cents per ton on the net output of crude oil collected into the field tanks less water and foreign substances. If the net quantity of crude oil received into the lessee's field storage tanks during any complete year exceeds 100,000 tons, a deduction of 12 cents per ton shall be made from the rate of royalty.

Natural gas 2 cents per 1 000 cu ft sold by the licensee

Iron ores or metallic iron 1 per cent of the value

Lead ores or metallic lead 2 per cent of the value of ores with an average silver content of less than 4 oz per ton and an additional 3 per cent of the value of the silver on material containing more than 4 oz

Tin ores and metallic tin When the London price of metallic tin per ton is

Less than £180, the royalty is	2 per cent of the value
£180, but less than £190, the royalty is	3 " " "
£190, " " £200, " "	4 " " "
£200, " " £220, " "	5 " " "
£220, " " £240, " "	6 " " "
£240, " " £260, " "	7 " " "
£260, " " £280, " "	8 " " "
£280, " " £300, " "	9 " " "
£300 or upwards, " "	10 " " "

Wolfram When the London price per unit is

Less than 30s, the royalty is	2½ per cent <i>ad val</i>
30s, but less than 35s, the royalty is	3 " "
35s, " " 40s, " "	5½ " "
40s or upwards, the royalty is	7½ " "

Tin wolfram ore For the purpose of computing royalty, mixed ore containing both tin and wolfram concentrates, if it contains 60 per cent and over of wolfram concentrate, is deemed to be wolfram ore, and if it contains less than 60 per cent wolfram concentrate, is deemed to be tin ore. The exporter of such mixed ore

shall make a declaration, supported by an assay, as to whether such ore is wolfram or tin ore. The Governor may permit the royalty to be collected in the form of an export duty.

The value of metallic tin, lead, iron, copper or wolfram concentrates shall, for the purpose of computing royalties, be deemed to be the actual market value of such metal in the London market on the 1st January, April, July or October next preceding the exportation at the rate of exchange in force on that day.

In the absence of evidence to the contrary, tin ore is deemed to contain 70 per cent tin, lead ore to contain 78 per cent lead, iron ore (hæmatite) to contain 60 per cent iron, pig iron to contain 95 per cent iron, and wolfram to contain 65 per cent tungstic oxide (WO_3).

Mica 5 per cent of the local average value as assessed by the Government Inspector of Mines. Where the assessed value is greater than the realized sale price a refund of 5 per cent on the difference will be made, provided that a properly authenticated claim be made within six months of despatch of the mica from British Honduras.

Gold A sum not exceeding \$1 per oz, as prescribed by the Governor in Council.

Other precious metals 5 per cent of the value.

Export Duties

Tin ore exported pays a duty equal to 50 per cent of the maximum royalty payable in respect of tin ore.

If the Governor is satisfied that all the tin ore exported by or on behalf of an exporter will be smelted in the United Kingdom or in a British possession, the Governor shall direct that such tin ore shall be exempt from the export duty until he shall otherwise direct.

Rents under Mining Leases

Oil leases 12½ cents per acre. If the total royalties upon crude oil in any half year amount to or exceed the half yearly rent, then the latter shall not be payable.

Mineral leases

Class A (*metalliferous minerals and precious metals lode leases*) \$2 50 per annum per acre or part thereof.

Class B (*metalliferous minerals and precious metals alluvial leases*) \$1 25 per annum per acre or part thereof.

Class C (*mica leases*) \$0 25 per annum per acre or part thereof.

Class D (*precious stones*)

Class E (*carbonaceous minerals*)

Class F (*earthy minerals leases*)

} Such rent as may here
after be prescribed

Both rent and royalty are payable in respect of mining leases. The Governor may reduce the rent payable either temporarily or for the remainder of the term of a lease.

Period and Renewal of Mining Leases

A mining lease may be issued for a period not exceeding 21 years, and it may be renewed once for a term not to exceed 21 years but the lessee has not a right to such renewal. A fixed charge of \$10 is made for the renewal of a mining lease.

JAMAICA*

There are no mining laws in Jamaica and there is no statutory provision as to the ownership of minerals. By the Common Law of England gold and silver found in England belong to the Crown by Royal prerogative and this rule applies as part of the Common Law in settled Colonies. Jamaica is a settled Colony and so in the absence of statutory provision to the contrary gold and silver in this Colony would seem to belong to the Crown. With regard to other minerals, *prima facie* the owner of the surface of the land is entitled to all beneath it except gold and silver. The only legal provision apart from the provisions of the Common Law in respect of gold and silver and apart from the *prima facie* presumption in regard to other minerals by reason of the ownership of the surface of the land is contained in a Proclamation of Oliver Cromwell which will be found in the first volume of the Revised Statutes of Jamaica.

This Proclamation (which may still be assumed to exist with full force and effect) reserved the Common Law right of the Crown with regard to gold and silver and provided for a tribute from the grantee of one fifth of the value in regard to precious stones and jewels and the fishery of pearls and one tenth of all metals found and gained except gold and silver.

The amount of royalties which would be leviable would possibly be those mentioned in the Proclamation in regard to pearls etc. and metals other than gold and silver.

There are no leases known as mining leases in Jamaica other than those provided for in 18 Vic Chap 32 which permits certain corporate bodies guardians of infants lunatics idiots and tenants in dower etc. to grant mining leases up to 50 years. This statute however does not affect the position of the ownership of minerals at Common Law.

* Thanks are due to the Colonial Secretary Jamaica for kindly furnishing the information from which this statement was compiled.

LEEWARD ISLANDS*

DOMINICA AND MONTSERRAT

In Dominica, by legal enactment passed in 1915, the Crown reserved the right to minerals and oil, reserving as far as precious metals and mineral oils were concerned the right to enter at all times upon the lands to search for and take away these. In 1933 this latter provision was extended to all minerals and mineral oils. Prior to 1915 the Crown reserved the right to all precious metals only.

Amount of Royalties and their Assessment

On Crown lands

Coal (exclusive of dust and coal used on the works) 5s per ton

Oil 5s per 40 galls, or 5 per cent of the gross value

Gold and silver 20 per cent *ad val*

Ironstone 20 per cent *ad val*

Copper tin lead molybdenum or other metals 4s 2d per ton of untreated material exported

Precious stones 30 per cent of the net profits of each year taken separately

Rents under Mining Leases

The surface rent shall not exceed 20s per acre whilst the dead rent will be determined by the Governor. Both royalty and dead rent are not payable in respect of the same lease, only the one which is the greater.

Period and Renewal of Mining Leases

Mining leases may be issued for a period not exceeding 30 years.

TRINIDAD†

Crude oil is mined in the Colony on (a) Crown lands, (b) alienated lands (purchased subsequent to 30th January, 1902) of which the Government own the entire mineral rights, (c) private lands (purchased prior to 30th January, 1902) the mineral rights of which are owned entirely by the surface owner.

Applicants for mining leases over alienated lands comprised under

* Thanks are due to the Colonial Secretary, Antigua, for kindly furnishing the information from which this statement was compiled.

† Thanks are due to the Inspector of Mines, Trinidad for kindly furnishing the information from which this statement was compiled.

(b) above are no longer required in the first instance, to come to terms with the surface owners before the lease is granted. There is a proviso, however, in the lease that lessees, before entering into any parcel of land, must satisfy the Government that they have come to terms with the surface owners or have made every reasonable effort to do so. The terms offered to surface owners are generally outright purchase of the surface of the land or compensation for any damage which may be done.

Mining leases over lands at (c) above are acquired by private transactions with the surface owners, who are owners also of the oil rights.

Amount of Royalties and their Assessment

Crude oil. The Land (Oil Mining) Regulations, 1934, provide that

(1) Until 31st December, 1936, royalty is payable upon a crude oil won as received in the field storage tanks of the lessee at a rate of 4d per barrel of 35 Imperial gallons at a temperature of 60° F.

(2) From and after 31st December, 1936, royalty is payable on crude oil at a rate of not less than 4d and not more than 9d per barrel of 35 imperial gallons at a temperature of 60° F. calculate upon the "ascertained value" as follows

When the ascertained value is—				The royalty shall be—	
Not more than 6s	3d. per barrel			4d	per barrel
More than 6s	3d., but not more than 8s	4d per barrel		5d.	" "
"	8s 4d,	"	10s 5d "	6d	" "
"	10s 5d.,	"	12s 6d "	7d	" "
"	12s 6d,	"	14s 7d "	8d	" "
"	14s 7d per barrel			9d	" "

The ascertained value shall be expressed in terms of the average Gulf export prices of gasoline and fuel oil in cargo lots during the three years preceding the 31st day of December, 1936, converted into the currency of the Colony (due allowance being made for fluctuations in the value of the dollar).

Colony and the dollar shall be calculated upon

using 20 per cent

by volume of 64° to 66° Baume gasoline and 80 per cent by volume of Grade C bunker fuel oil.

(3) As soon as may be after 31st December, 1936, the rate of royalty on crude oil as determined by the Governor in the manner aforesaid shall be published in the *Royal Gazette*, and royalty on crude oil as aforesaid shall be payable at such rate for the three years ending on 31st December, 1939, and thereafter during the term of the lease unless or until altered at the expiration of any

triennial period Any such alteration in the rate of royalty for the triennial period next ensuing shall be published in the *Royal Gazette*

The royalties on crude oil payable under leases granted prior to 1934 varied considerably Thus, certain of the older leases provide that if the production in any one year does not exceed 100,000 tons the royalty rate is 2s per ton The Governor may take 10 per cent of the production in kind There is a sliding scale reduction for higher productions up to 133,333 tons and over, the royalty rate is reduced to 1s 6d per ton

All crude oil, bituminous minerals and natural gas used for the works are free of royalty

Under later leases the royalty payable is 10 per cent of the net crude oil received in the lessees' field storage tanks The Governor may require the lessees to pay its equivalent money value, deemed to be 3s per ton, but either party may at the expiration of every 3 years require an adjustment of this value within limits of 2s and 5s per ton

According to a Crown lease granted to the Kern Trinidad Oil fields Ltd, if the lessees have erected a refinery, the Governor may take in lieu of crude oil quantities of refined products equivalent to the quantities produced by the amount of crude oil payable by way of royalty in kind, due allowance being made for the services of refining, etc Delivery of refined products shall not be required from the lessees to a greater extent than one tenth of their existing refining facilities currently in operation

Casing head petroleum spirit

(1) Until 31st December, 1936, royalty on all casing head petroleum spirit recovered by the lessee is payable at a rate of $\frac{1}{4}$ d per Imperial gall where the casing head petroleum spirit recovered is less than 2 Imperial galls per 1,000 cu ft of gas treated, and $\frac{1}{2}$ d per Imperial gallon where the casing head petroleum spirit recovered is 2 Imperial galls and over per 1,000 cu ft of gas treated

(2) From and after 31st December, 1936, royalty will be payable on all casing head petroleum spirit recovered by the lessee at a rate of not less than $\frac{1}{4}$ d per Imperial gall and not more than 4d per Imperial gall calculated in Table on page 89

Natural gas Royalty is payable at a rate of 2d per 1,000 cu ft sold by the lessee, calculated at an absolute pressure of one atmosphere and at a temperature of 60° F

All crude oil and products thereof and all casing head petroleum spirit which is certified by the Inspector of Mines of the Colony for the time being to have been used by the lessee for the purpose of drilling wells and the production of crude oil prior to storage in field tanks of the lessee, including pumping operation to such field tanks, is free of royalty

When the average Gulf export prices (converted into the currency of the Colony*) per American gallon of 128 to 128 1/2 gallons during the previous triennium is—	(a) Where the existing lead petroleum spirit recovered is less than 2 Imp galls per 1,000 cu ft of gas treated—	(b) Where the existing lead petroleum spirit recovered is 2 Imp galls and over per 1,000 cu ft of gas treated—
--	---	--

The results shall be—

	1d per Imp gall	1d per Imp gall
Not more than 5d.	1d per Imp gall	1d per Imp gall
More than 5d., but not more than 7 1/2d.	1d " "	1d " "
More than 7 1/2d., but not more than 10d.	1d " "	1 1/2d " "
More than 10d., but not more than 1s 0 1/2d.	1d " "	2d " "
More than 1s 0 1/2d., but not more than 1s 3d.	1 1/2d " "	2 1/2d " "
More than 1s 3d., but not more than 1s 5 1/2d.	1 1/2d " "	3d " "
More than 1s 5 1/2d., but not more than 1s 8d.	1 1/2d " "	3 1/2d " "
1s 8d.	2d " "	4d " "

Asphalt Crude, 2s 6d per ton
Dried, 3s 6d per ton

Export Duties

Asphalt Crude, 5s per ton
Dried, 6s 11d per ton

Rents under Mining Leases

Dead rent is payable on the maximum area held by the lessees under any lease granted under the Land (Oil Mining) Regulations, 1934, the rates per acre per annum being as follows 1st year, 4s, 2nd year, 5s, 3rd year, 7s, 4th year, 9s, 5th year, 12s, and for the 6th and subsequent years at the rate of 15s per acre per annum.

The above mentioned Regulations provide that the lessee shall pay for all Crown land which he may take up, use or occupy for the purpose of the lease an annual rent of 1s per acre or part of an acre.

The lessee shall also enter into a covenant that he will erect in the Colony a refinery capable of dealing with a named percentage of the output of oil from the area leased to him, and of so treating the oil as to produce oil fuel suitable for the requirements of the Imperial Government, provided that the lessee may with the Governor's consent first had and obtained, arrange with the proprietors of some approved refinery already erected in the Colony to refine the oil in

* Due allowance is made for fluctuations in exchange between the currency of the Colony and that of the U.S.A.

triennial period. Any such alteration in the rate of royalty for the triennial period next ensuing shall be published in the *Royal Gazette*.

The royalties on crude oil payable under leases granted prior to 1934 varied considerably. Thus, certain of the older leases provide that if the production in any one year does not exceed 100,000 tons the royalty rate is 2s. per ton. The Governor may take 10 per cent. of the production in kind. There is a sliding scale reduction for higher productions up to 133,333 tons and over; the royalty rate is reduced to 1s. 6d. per ton.

All crude oil, bituminous minerals and natural gas used for the works are free of royalty.

Under later leases the royalty payable is 10 per cent. of the net crude oil received in the lessees' field storage tanks. The Governor may require the lessees to pay its equivalent money value, deemed to be 3s. per ton, but either party may at the expiration of every 3 years require an adjustment of this value within limits of 2s. and 5s. per ton.

According to a Crown lease granted to the Kern Trinidad Oil-fields Ltd., if the lessees have erected a refinery, the Governor may take in lieu of crude oil quantities of refined products equivalent to the quantities produced by the amount of crude oil payable by way of royalty in kind, due allowance being made for the services of refining, etc. Delivery of refined products shall not be required from the lessees to a greater extent than one-tenth of their existing refining facilities currently in operation.

Casing head petroleum spirit :

(1) Until 31st December, 1936, royalty on all casing head petroleum spirit recovered by the lessee is payable at a rate of $\frac{1}{4}$ d. per Imperial gall. where the casing head petroleum spirit recovered is less than 2 Imperial galls. per 1,000 cu. ft. of gas treated, and $\frac{1}{2}$ d. per Imperial gallon where the casing head petroleum spirit recovered is 2 Imperial galls. and over per 1,000 cu. ft. of gas treated.

(2) From and after 31st December, 1936, royalty will be payable on all casing head petroleum spirit recovered by the lessee at a rate of not less than $\frac{1}{4}$ d. per Imperial gall. and not more than 4d. per Imperial gall. calculated in Table on page 89.

Natural gas. Royalty is payable at a rate of 2d. per 1,000 cu. ft. sold by the lessee, calculated at an absolute pressure of one atmosphere and at a temperature of 60° F.

All crude oil and products thereof and all casing head petroleum spirit which is certified by the Inspector of Mines of the Colony for the time being to have been used by the lessee for the purpose of drilling wells and the production of crude oil prior to storage in field tanks of the lessee, including pumping operation to such field tanks, is free of royalty.

When the average Gulf export prices (converted into the currency of the Colony*) per American gallon of 61° to 66° N. gasoline during the previous triennium is—	(a) Where the casing head petroleum spirit recovered is less than 2 Imp galls per 1,000 cu ft of gas treated—	(b) Where the casing head petroleum spirit recovered is 2 Imp galls and over per 1,000 cu ft of gas treated—
--	---	--

The royalty shall be—

	1d per Imp gall	1d per Imp gall
Not more than 7d.		
More than 7d, but not more than 7½d.	1d	" "
More than 7½d, but not more than 10d.	1½d	" "
More than 10d, but not more than 1s 0½d.	1d	" "
More than 1s 0½d, but not more than 1s 3d.	1½d	" "
More than 1s 3d, but not more than 1s 5½d.	1½d	" "
More than 1s 5½d, but not more than 1s 8d.	1½d	" "
1s 8d.	2d	" "

Asphalt Crude, 2s 6d per ton
Dried, 3s 6d per ton

Export Duties

Asphalt Crude, 5s per ton
Dried, 6s 11d per ton

Rents under Mining Leases

Dead rent is payable on the maximum area held by the lessees under any lease granted under the Land (Oil Mining) Regulations, 1934, the rates per acre per annum being as follows 1st year, 4s, 2nd year, 5s, 3rd year, 7s, 4th year, 9s, 5th year, 12s, and for the 6th and subsequent years at the rate of 15s per acre per annum.

The above mentioned Regulations provide that the lessee shall pay for all Crown land which he may take up, use or occupy for the purpose of the lease an annual rent of 1s per acre or part of an acre.

The lessee shall also enter into a covenant that he will erect in the Colony a refinery capable of dealing with a named percentage of the output of oil from the area leased to him, and of so treating the oil as to produce oil fuel suitable for the requirements of the Imperial Government, provided that the lessee may, with the Governor's consent first had and obtained, arrange with the proprietors of some approved refinery already erected in the Colony to refine the oil in

* Due allowance is made for fluctuations in exchange between the currency of the Colony and that of the U.S.A.

accordance with the requirements of the Imperial Government, provided also that the Governor shall have the power to waive this condition in any lease either for a fixed period to cover the initial stages of development or until a reasonable time after the Imperial Government shall have announced its readiness to purchase from the lessee stated quantities of oil fuel at their current commercial values

Royalty and rent are not payable in respect of the same lease, only such one of them as may be the greater amount.

Period and Renewal of Mining Leases

A mining lease for petroleum may be issued under the Land (Oil Mining) Regulations, 1934, for a first term not exceeding 30 years, and the lease may contain a clause permitting renewal for a further period not exceeding 30 years, providing that the dead and surface rent payable under the lease during such further period may be increased by not more than 50 per cent. The royalty payable from time to time during the same period shall be that which may be in force under the order of the Governor

FALKLAND ISLANDS

Under section 21 (g) of the Land Ordinance, 1903, all diamonds and all mines of coal, gold, silver and other metals are reserved to the Government in all grants or leases of Crown land. The Mining Ordinance, 1918, which applies to unalienated lands and to lands the subject of an existing Crown grant or lease, provides for the grant by the Governor of prospecting and mining leases

So far as can be ascertained, no royalties have yet been fixed for minerals except a rate of 6d per ton on sand removed from the beaches of Stanley Harbour

ASIA

NORTH BORNEO*

ALL coal, minerals, precious stones and mineral oils are absolutely reserved to the Government or its licensees. The ownership of all minerals in North Borneo is in the hands of the Chartered Company, with the exception of a concession to search for coal and acquire leases for coal mining in the Sandakan Residency, granted to the Cowie Harbour Coal Co. for 21 years from 1921.

Amount of Royalties and their Assessment

Minerals (other than coal, precious stones and mineral oils) 5 per cent *ad val*

Export Duties

The North Borneo Customs tariff specifies an export duty of 10 per cent on metals and metalliferous ores, but this duty is suspended until further notice.

Rents under Mining Leases

Licences to remove earth, stone, gravel, coral, sand, shell, loam or clay, or products made therefrom, pay \$1 per person employed per month.

Period and Renewal of Mining Leases

The term of mining leases has not yet been fixed by rule under the Mining Ordinance, 1927.

CEYLON†

Land in the island may be roughly divided into four categories

(a) Private land, the ownership of which carries with it the right to work all minerals, excluding gold and silver which belong to the Crown. In practice no royalty is demanded by the Crown in respect of gold and silver if found.

* Thanks are due to the Secretary, British North Borneo (Chartered) Co. for kindly furnishing the information from which this statement was compiled.

† Thanks are due to the Inspector of Mines, Ceylon, for assistance given in the preparation of this statement.

(b) Private lands, formerly the property of the Crown, which were granted with a reservation of minerals.

(c) Crown lands.

(d) Foreshore. According to Ordinance No. 6, 1926, all heavy mineral sand on or under the foreshore (as defined by Proclamation) is vested in the Crown.

Amount of Royalties and their Assessment

Crown lands. A royalty not less than 5 per cent. of the value of the minerals at the mine may be charged on all minerals removed or smelted.

Private lands (see (b) above). Where the mineral rights belong to the owner of the land the royalty payable by a lessee is not fixed by enactment, but by negotiation. Royalty usually varies between one-quarter and one-tenth of the mineral won. No royalty is demanded by the Crown in respect of gemstones found on private lands.

Rents under Mining Leases

As a general rule rents of mining leases are not fixed by Regulation. In the case of Crown lands likely to contain plumbago of ordinary quality, the lease of the land with mining rights may be offered for sale outright by public auction. Such leases may be for a term of 15 years. Leases of lands reported to contain a good quantity of plumbago of more than ordinary quality may be put up for sale on certain specified conditions, the period being 5 years and the rent not less than Rs. 100 per acre per annum.

In the case of Crown lands likely to contain gemstones, a lease with mining rights, usually for a period of one year, may be offered for sale by public auction or tender.

Period and Renewal of Mining Leases

Crown lands. Leases may be granted for a period not exceeding 15 years, and the lessee has the option of renewal for another period of 15 years upon the same terms.

CYPRUS*

The ownership of all minerals is vested in the Crown, except on private lands enclosing town and village sites (i.e., preserved for building purposes).

* Thanks are due to the Inspector of Mines, Cyprus, for kindly furnishing the information from which this statement was compiled.

Amount of Royalties and their Assessment

The Ottoman Mines Regulations Law of 2 Shaban, 1285 (A.D. 1867) is still in force in this Colony, and fixes most of the fees chargeable under mining leases

<i>Asbestos</i>	5 per cent <i>ad val</i> per ton exported
<i>Chrome iron ore</i>	1s 4½ c p per ton exported
<i>Gypsum</i>	3 c p per ton exported
<i>Lime and limestone</i>	4½ c p per ton exported
<i>Magnesite</i>	5 per cent <i>ad val</i> per ton exported
<i>Manganese</i>	5 per cent <i>ad val</i> per ton exported
<i>Pyrites (cuprifercous)</i>	4½ c p per ton extracted
<i>Terra umbra</i>	3s 4½ c p per ton exported
<i>Stone (sawn or dressed)</i>	4½ c p per ton exported
<i>Other minerals</i>	5 per cent <i>ad val</i> per ton exported
	[9 c p (copper piastres)=1s]

Export Duties

There are no export duties on coal ores minerals or metals other than those shown above

Rents under Mining Leases

Rental £5 per annum per sq mile or part thereof The payment of rental is independent from that of royalties and there is no rebate of rental at any time

Period and Renewal of Mining Leases

A mining lease may be granted for any period up to 99 years

If the lessees at or before the expiration of the lease apply to the lessor for a new lease they will be given preference on equal terms over other applicants for a lease

HONG KONG*

The right to search for and work minerals in Crown lands belongs to the Government

Amount of Royalties and their Assessment

The Governor in Council has power to levy royalties on minerals produced in the Colony and the Regulations in force under the

* Thanks are due to the Clerk of Councils Hong Kong for kindly furnishing the information from which this statement was compiled

Prospecting and Mining Ordinance, 1906, provided for a royalty of 5 per cent *ad val*. Recently, however, in view of the small and scattered nature of the deposits and consequent high cost of collecting it was decided to rescind this Regulation and to deal with each application on its merits.

Rents under Mining Leases

No fixed scale is in operation

Period and Renewal of Mining Leases

Mining leases may be granted by the Governor for periods not exceeding 75 years

PALESTINE*† AND TRANS-JORDAN*

All minerals and mines are vested in the High Commissioner in Palestine and in H H the Amir in Trans Jordan. The Palestine Mining Ordinance 1925 and the Trans Jordan Mining Law 1926 both contain the provisions given below

Amount of Royalties and their Assessment

Petroleum Royalty is levied on the net crude oil received into the lessee's field storage tanks during the preceding twelve months at the following rates

	<i>Per Cent</i>
On the first 10 000 tons	5
On each ton exceeding 10,000, but not exceeding 50 000 tons	7½
On each ton exceeding 50 000, but not exceeding 90,000 tons	10
On each ton exceeding 90 000, but not exceeding 130,000 tons	12½
On each ton exceeding 130 000 tons	15

Net crude oil means crude oil after deducting water and foreign substances and includes casing head gasoline

During the first 2 years of the lease, the royalty per ton of net crude oil may, at the discretion of the lessor, be fixed at 20 piastres per ton without prejudice to the power of the lessor to take royalty in kind during those 2 years

Natural gas 1 piastre per 1 000 cu ft of natural gas sold

* Territory mandated to the United Kingdom

† Thanks are due to the Controller of Mines Palestine for kindly furnishing the information from which this statement was compiled

Non precious minerals 2 per cent of the product or the equivalent money value thereof at the mine. Non precious minerals comprise all minerals except petroleum and precious minerals.

Precious minerals 5 per cent of the product or the equivalent money value at the mine. Precious minerals include precious stones, precious metals (gold, platinum, silver, etc.), and ores of precious metals.

The equivalent money value of a mineral is fixed on 1st January of each year by agreement between the lessor and lessee or, failing this, by arbitration.

Rents under Mining Leases

Mineral oil £2½ per hectare per annum

Precious minerals £5 per hectare per annum

Non precious metallic minerals £5 per hectare per annum

Non precious non metallic minerals £2½ per hectare per annum

Period and Renewal of Mining Leases

Minerals (including oil) A mining lease for minerals or a mining oil lease may be granted for a term not exceeding 30 years. Provided always that so long as minerals are produced in payable quantities the lessee shall have a preferential right to renewal of his lease on fair and proper terms.

Licences to quarry limestone, sandstone, slate, granite or other igneous or metamorphic rocks, quartz, marble, gypsum, flint, chalk, gravel, sand or clay are issued for a period not exceeding 3 years and may be renewed on payment of the prescribed fees.

BRITISH INDIA*

Except in the permanently settled estates it is presumed that in the absence of any judicial precedent or proof of established usage the State has the right to minerals. The ruling that grantees of waste lands (whether or not the grants expressly comprise all products above and below the surface) are in the absence of provision to the contrary entitled to mines of gold and silver found thereupon is limited to grantees of waste land in fee simple made in accordance with the rules framed upon the instructions given in Sir Charles Wood's despatch No. 14 of 1862. Grants of

Prospecting and Mining Ordinance, 1906, provided for a royalty of 5 per cent *ad val*. Recently, however, in view of the small and scattered nature of the deposits and consequent high cost of collecting, it was decided to rescind this Regulation and to deal with each application on its merits.

Rents under Mining Leases

No fixed scale is in operation

Period and Renewal of Mining Leases

Mining leases may be granted by the Governor for periods not exceeding 75 years

PALESTINE*† AND TRANS-JORDAN*

All minerals and mines are vested in the High Commissioner in Palestine, and in H H the Amir in Trans Jordan. The Palestine Mining Ordinance, 1925 and the Trans Jordan Mining Law, 1926, both contain the provisions given below

Amount of Royalties and their Assessment

Petroleum Royalty is levied on the net crude oil received into the lessee's field storage tanks during the preceding twelve months at the following rates

	<i>Per Cent</i>
On the first 10,000 tons	5
On each ton exceeding 10,000, but not exceeding 50,000 tons	7½
On each ton exceeding 50,000, but not exceeding 90,000 tons	10
On each ton exceeding 90,000, but not exceeding 130,000 tons	12½
On each ton exceeding 130,000 tons	15

Net crude oil means crude oil after deducting water and foreign substances and includes casing head gasoline

During the first 2 years of the lease, the royalty per ton of net crude oil may, at the discretion of the lessor, be fixed at 20 piastres per ton without prejudice to the power of the lessor to take royalty in kind during those 2 years

Natural gas 1 piastre per 1,000 cu ft of natural gas sold

* Territory mandated to the United Kingdom

† Thanks are due to the Controller of Mines, Palestine, for kindly furnishing the information from which this statement was compiled

Non-precious minerals—2 per cent. of the product or the equivalent money value thereof at the time. *Non-precious minerals* comprise all minerals except precious metals and minerals.

Precious minerals—3 per cent. of the product or the equivalent money value at the time. *Precious minerals* include precious stones, precious metals (gold, platinum, silver, etc.) and ores of precious metals.

The equivalent money value of a mineral is fixed on 1st January of each year by agreement between the lessor and lessee or, failing this, by arbitration.

Rents under Mining Leases

Mineral oil—£24 per hectare per annum

Precious minerals—£5 per hectare per annum

Non-precious metallic minerals—£5 per hectare per annum

Non-precious non-metallic minerals—£24 per hectare per annum

Period and Renewal of Mining Leases

Minerals (including oil) lease may be renewed always the lessee shall have a preferential right to renewal of his lease on fair and proper terms.

Licences to quarry limestone, sandstone, slate, granite or other igneous or metamorphic rocks, quartz, marble, gypsum, flint, chalk, gravel, sand or clay, are issued for a period not exceeding 3 years, and may be renewed on payment of the prescribed fees.

BRITISH INDIA*

Except in the permanently settled estates, it is presumed that in the absence of any judicial precedent or proof of established usage the State has the right to minerals. The ruling that grantees of waste lands (whether or not the grants expressly comprise all products above and below the surface) are, in the absence of provision to the contrary, entitled to mines of gold and silver found thereupon, is limited to grantees of waste land in fee simple made in accordance with the rules framed upon the instructions given in Sir Charles Wood's despatch No. 14 of 1862. Grants of

* Thanks are due the Director for furnishing

the ore from the mine to the place of sale is deducted from the market price of the ore at the place of sale. The remainder thus obtained is "the sale value at the pit's mouth or on the surface" on which royalty is to be charged.

If the market price of the ore is not known, application should be made to the Development Commissioner, who will fix it from the market price of the metal and from the percentage of metal obtained from the ore.

"Dressed ore" means ore in the condition in which it is exported, when reduced to the purest state practicable by hand picking or other treatment.

It is provided by Mining Rule 50 (1) that if a lessee shall discover any mineral on his land the royalty for which was not provided for in his original lease, then royalty shall be paid therefor at such rate, not being less than 20 per cent of the value thereof, as the Local Government may determine, until a mining lease has been obtained in respect of such mineral.

Rents under Mining Leases

A lessee is not called upon to pay both dead rent and royalty in respect of the same lease, but only such one of them as may be the greater amount.

Dead Rent (minimum)

(1) <i>Coal, lignite, minerals used in agriculture and chemical manufactures, such as bauxite, gypsum iron pyrites and pyritous shales</i>	4 annas per acre
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(2) <i>Natural petroleum (including natural gas)</i>	
--	--

For areas held under leases within the territories administered by any one Local Government

For leases of areas not exceeding a total of 10 sq miles	Re 1 per acre
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For leases of areas exceeding 10 sq miles, but not exceeding 50 sq miles	{	Re 1 per acre for the first 10 sq miles; Rs 2 per acre for the excess over 10 sq. miles
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For leases of areas above 50 sq miles, but not exceeding 100 sq miles	{	Re 1 per acre for the first 10 sq miles, Rs 2 per acre for the next 40 sq miles, Rs 5 per acre for the excess over 50 sq miles
---	---	--

Dead Rent (minimum).

For leases of areas exceeding 100 sq miles	Re 1 per acre for the first 10 sq miles; Rs 2 per acre for the next 40 sq miles; Rs. 5 per acre for the next 50 sq miles; and Rs. 10 per acre for the excess over 100 sq miles
(3) <i>Iron ore</i>	1 anna per acre.
(4) <i>Gold and silver, precious stones</i> and all minerals [not included in (1) above, except iron ore and petroleum]	Re 1 per acre

These minima are purposely fixed low, but they are liable to be largely exceeded according to the value of the deposit and degree of development of the country

Period and Renewal of Mining Leases

A mining lease may be granted for a term not exceeding 30 years, but the lease may contain a clause permitting renewal for a period not exceeding 30 years on a dead and surface rent not exceeding twice the original dead and surface rent respectively, the royalty payable being that which may on the day next following that on which the original lease shall determine be in force under the orders of competent authority. In the case of iron ore the original lease may also contain a clause permitting a second renewal for a further period not exceeding 30 years on a dead and surface rent not exceeding twice the dead and surface rent respectively fixed for the first renewal of the lease, the royalty payable being that which may on the day next following that on which the first renewal shall determine be in force under the orders of competent authority. The lessee shall be at liberty to determine the lease at any time on giving not less than twelve calendar months' notice in writing

The following indicate certain deviations from and additions to the above "Mining Rules" now in force in the several Provinces and States, with especial reference to "minor minerals"

AJMER-MERWARA**Amount of Royalties and their Assessment**

Mica, felspar, china clay, soapstone, asbestos and greenstone.
2½ per cent of the sale value at the pit's mouth

pies per ton, more than 15 miles, 4 annas 10 pies per ton, limestone quarried for ballast, 1 anna 7 pies per ton. No royalty is levied on limestone used for buildings at the site.

Ochre 2½ per cent of the value at the pit's mouth

Mica A combined rent and royalty of 1 rupee 8 annas per acre is charged subject to the reservation to the Government in every lease of the power at any time on giving two years' notice, to levy royalty at the rate of 5 per cent of the pit head value of the mica, and a surface rent

Rents under Mining Leases

Limestone On quarries ordinarily limited to 1 sq mile, the annual rental to be fixed by the Commissioner must not exceed Rs 100 per annum

Mica A combined rent and royalty is charged (*see above*)

Period and Renewal of Mining Leases

Limestone Leases to quarry which are issued for a term not exceeding 20 years may be renewed on terms to be agreed between the lessee and the Collector or Deputy Commissioner

BOMBAY

Section 69 of the Bombay Land Revenue Code reserves to the Government the right to mines and mineral products on all unalienated land subject to the proviso that nothing in that section shall be deemed to affect any subsisting rights of an occupant of such land in respect of mines or mineral products as given in the Introduction (p vi) of the 'Mines Manual' Bombay

Amount of Royalties and their Assessment

Soapstone, talc and potstone are included under 'all other minerals' in the Mining Rules (*see p 97*)

Chromite 6 annas per ton. The Government, however, reserves the power of raising the rate when the current market price of the mineral increases

Manganese Lessees who have not accepted the system of assessment of royalty at 2½ per cent of the sale value of the ore at the pit's mouth are required to pay in respect of concessions granted prior to June, 1921, royalty on a sliding scale based on the average price per unit f o b Bombay, which is fixed by the Local Government on the average price prevailing during each half year. No royalty is charged when the price per unit of manganese is 5d or under. When the price per unit is 5½d the royalty per ton is 0 6 anna, and this rate is increased by 0 6 anna for each increase of ½d in the price per unit up to 10d per unit

BURMA

The right to all mines and mineral products has been reserved to Government in Burma except in cases in which such right has been alienated by grant (e.g. the grants under the Waste Land Grant Rules 1865) or lease made by or on behalf of the British Government and Government has been given all powers necessary for the proper enjoyment of its right thereto and may dispose of any such right and powers to any persons in such manner as to it may seem fit

The Mining Rules apply to the right to mine for precious stones and all the more important minerals including mineral oils

In the case of petty oil winning leases in the Kyau pyu district and to the mining of tin containing not more than 3 per cent of wolfram by native methods in the Mergui district special rules apply

Amount of Royalties and their Assessment

Jade jadeite and amber The extraction of these from public forest land in Upper Burma is regulated by the Burma Forest Act 1909. An *ad val* duty of 33½ per cent is levied on jadestone and 5 per cent on amber

Minor minerals Laterite limestone steatite marble gypsum clay and stone are included among minor minerals and conditions for their mining are regulated by the Local Government

CENTRAL PROVINCES AND BERRAR

Except in the case of a few villages granted under the Waste Lands Sales Rules the ownership of minerals and mineral oils throughout the Central Provinces and Berar belongs to the Government

Amount of Royalties and their Assessment

Manganese Conditions are the same as for Bombay (see p 102)

Mica In mining leases for mica a clause is inserted to the effect that royalty (5 per cent of the sale value) shall be calculated upon the weight and value of the mica. For the present the following scale of values has been adopted for the purpose of calculating royalty leviable

	Val e per Lb			
	Sta ned Mica		Clear Mica	
	Rs	a	Rs	a
4 sq in and under	0	4	0	5
Above 4 sq in and up to 8 sq in	0	6	0	11
Above 8 sq in and up to 16 sq in	0	15	3	8
Above 16 sq in and up to 32 sq in	2	4	6	2
Above 32 sq in and up to 48 sq in	4	8	8	12
Above 48 sq in and up to 64 sq in	6	12	10	4
Above 64 sq in and up to 80 sq in	9	0	15	12
Above 80 sq in and up to 96 sq in	11	4	19	4
Above 96 sq in and up to 112 sq in	13	8	22	12

And so on in proportion, the size of the plates being calculated according to the greatest rectangular area the slabs will yield

Flimsy mica 8 annas per lb, irrespective of size and quality

Minor minerals The minerals which are dealt with by the Local Government include (1) sand and clay, (2) other minerals such as slate building stone, ochre limestone, soapstone marble hæmatite or red oxide of iron (intended to be worked and used solely for the manufacture of paints or colour washes)

The royalty levied on minor minerals is $2\frac{1}{2}$ per cent of the value at the pit's mouth commutable at the option of the Local Government into a fixed rate per weight of mineral revisable every 5 years. The royalty on limestone has been commuted at the fixed rate of 4 annas per 100 maunds (approx 1d per ton)

Rents under Mining Leases

With the exception of manganese ore, for which the rate of dead rent has been fixed by the Local Government at Rs 5 per acre, subject to a reduction to half that rate whenever the price of ore falls below 1s per unit of manganese f o b Bombay the rates of dead rent on all other minerals and metals are fixed by the Local Government with reference to the particular circumstances of each case. When submitting applications for mining concessions Deputy Commissioners as a general rule base their proposals for dead rent on a consideration of the royalty on half the estimated output. When an area is granted to a concessionaire for working more than one mineral it is open to the Local Government to charge a separate dead rent in respect of each mineral

Limestone Rs 12 per acre per annum

Clay Rs 10 per acre per annum

Period and Renewal of Mining Leases

Quarry leases are issued for a term not exceeding 10 years. Unless application is specifically made for a clause for renewal, no such clause is inserted in mining leases

MADRAS

The State's right to minerals varies in different classes of land in accordance with the tenure and is described in detail in the Madras "Mining Manual," 1929, pp 47-48

Amount of Royalties and their Assessment

Mica 5 per cent of the sale value at the pit's mouth on mica removed from the mine. Royalty is calculated on the scale of values drawn up by the Board of Revenue. The values applicable

in respect of lands as to which the State claims full right to minerals are given under Central Provinces and Berar (p 103)

Minor minerals The mining or quarrying of minor minerals such as stone gravel slate laterite or clay on lands held on Ryotwari tenure and land on which the State claims a share of the minerals may be subject to the payment of seigniorage fees or an acreage assessment, the maxima of which vary with the district

Rents under Mining Leases

The rates for mining leases for land on which the Government claims full rights to the minerals are given on p 98

On lands held on Ryotwari tenure and other lands in which the State claims a share of the minerals the minimum dead rent is as follows

	<i>Dead Rent per Acre (minimum)</i>
<i>Coal and coal dust</i> (exclusive of that used on the works)	2 annas
<i>Mica petroleum oil shale gold silver and precious stones</i>	8
<i>Iron ore</i> (for the extraction of iron)	6
<i>Other minerals</i> (not specified above and having a high commercial value)	8

NORTH WEST FRONTIER PROVINCE

The ownership of minerals in this province is vested in the Crown

Amount of Royalties and their Assessment

Minor minerals Minor minerals are treated under two heads (1) Sand and clay including pottery clay and (2) other minerals such as slate building stone ochre limestone soapstone or steatite marble etc

Clay and sand These minerals are only worked on a small scale and rules for their working have not been formulated

Other minor minerals (excluding limestone) In the case of marble the royalty is 8 annas per 100 cu ft in the rough—i.e. before cutting

For other minor minerals the royalty is 2½ per cent on the value of the raw material at the pit's mouth commutable at the option of the Local Administration into a fixed rate by weight of the mineral revisable every 5 years The rate for the first 5 years of the lease to be settled on the working of the first year and to be decided after an examination of the accounts kept by the lessee

Limestone The royalty has been commuted by the Local Administration into the fixed rate of 5 annas per 100 mounds This

rate is revisable at the option of the Local Administration quinquennially from the date of issue of the lease

Rents under Mining Leases

Quarry leases The dead rent is decided by the Local Administration on the merits of each case with due regard to the nature of the mineral the value of the deposit and the degree of development of the industry in the area concerned In all such cases the Deputy Commissioner submits proposals to the Revenue Commissioner for the fixation of a suitable rate

Period and Renewal of Mining Leases

Quarry leases for minor minerals are granted for a period of 10 years, or such shorter term as the applicant may desire, and are renewable on expiry for a further similar period

PUNJAB

Under Section 41 of the Punjab Land Revenue Act 1887 all mines of metal and coal and all earth oil and gold washings are deemed to be the property of the Government and all powers necessary for the proper enjoyment of its right thereto are reserved to the Government

The mining or quarrying of minor minerals is dealt with in the report of the Financial Commissioner for 1922

UNITED PROVINCES

In the United Provinces minerals belong to Government in all the temporarily settled districts In permanently settled areas (mostly in the Benares division) the State ordinarily neither owns nor has any right to work mines or minerals But there is an exception to the general principle as under Act V of 1886 the State levies duty on all stone quarries in the stone *mahal* Mirzapur

INDIA (NATIVE STATES)

ALWAR*

The right to all minerals in the State is vested in the Durbar

Amount of Royalties and their Assessment

Coal (exclusive of dust and coal used on the works) 5 per cent of the sale value at the pit's mouth with a minimum of 2 annas per ton

* Thanks are due to the Agent to the Governor General in Rajasthan for kindly furnishing the information from which this statement was compiled

Coal dust Half the rates fixed for coal

Oil 8 annas per 40 galls or 5 per cent *ad val* of the gross value

Copper, tin, lead, zinc, cobalt, nickel, aluminium and mercury $7\frac{1}{2}$ per cent on the profits* of each year taken separately or 5 per cent of the gross value at the option of His Highness' Government

Gold and silver 10 per cent of the profits of each year taken separately or 5 per cent of the gross value at the option of His Highness' Government

Iron 1 anna per ton of ironstone

Soapstone Not exceeding 6 annas per mound (approx 15s per ton) the rate to be fixed for each case

Mica 10 per cent of the sale value at the pit's mouth

Precious stones To be fixed for each lease and not to exceed 50 per cent on the net profit of each year taken separately or 25 per cent on the gross value at the option of His Highness' Government

Other minerals 5 per cent of the sale value at the pit's mouth or on the surface of the dressed ore or metal convertible at the option of His Highness' Government to an equivalent charge per ton to be fixed annually or for a term

The rates of royalty are subject to such minimum charges and are liable to such alteration as His Highness' Government may from time to time notify in the *Official Gazette*

Rents under Mining Leases

The minimum annual dead rents payable are as follows

Coal 4 annas per acre

Oil Re 1 per acre

Iron 1 anna per acre

Gold and silver Re 1 per acre

Other metals and minerals Re 1 per acre

These minima are purposely fixed low but they are liable to be largely exceeded according to the nature of the deposit and the degree of development of the country

Both royalty and dead rent are not payable in respect of the same lease only such one of them as may be the greater amount

Period and Renewal of Mining Leases

A mining lease may be granted for a term not exceeding 30 years and the lease may contain a clause permitting renewal for a period

* Profits See British India p 97 (footnote)

not exceeding 30 years, on dead and surface rents not exceeding twice the original dead and surface rents respectively, the royalty payable being that which may be enforced under the orders of competent authority

BANGANAPALLE*

The ownership of all minerals is vested in the Ruler of the State

Amount of Royalties and their Assessment

Royalties which have so far been imposed include the following

Diamonds 30 per cent of the sale value

Stone slabs A fixed rate per annum for the quarry, usually decided by tender or auction

Rents under Mining Leases

Diamonds Rs 1 000 per annum

Stone slabs Nil

Period and Renewal of Mining Leases

Leases have been issued for periods ranging from 3 to 30 years

BHARATPUR†

The ownership of all minerals in the State is vested in the Durbar

Amount of Royalties and their Assessment

Coal (exclusive of dust and coal used on the works) 5 per cent of the sale value at the pit's mouth, with a minimum of 2 anna per ton

Coal dust Half the rates fixed for coal

Oil 8 annas per 40 galls or 5 per cent of the gross value

Copper, tin, lead, zinc, cobalt, nickel, aluminium, and mercury 7½ per cent of the profits‡ of each year taken separately or 5 per cent of the gross value, at the option of the Durbar

Gold and silver 10 per cent of the profits of each year taken separately or 5 per cent of the gross value, at the option of the Durbar

* Thanks are due to the Director of the Geological Survey of India for kindly obtaining from the Dewan of Banganapalle the information from which this statement was compiled

† Thanks are due to the Agent to the Governor General in Rajputana for kindly furnishing the information from which this statement was compiled

‡ Profits See British India, p. 97 (footnote)

- Iron* 1 anna per ton of ironstone
- Soapstone* Not exceeding 6 annas per maund (approx 15s per ton), to be fixed for each case
- Mica* 10 per cent of the sale value at the pit's mouth
- Beryl* 30 per cent of the net profits of each year taken separately or 15 per cent of the gross value
- Emerald* 50 per cent of the net profits of each year taken separately or 25 per cent of the gross value
- Aquamarine* 40 per cent of the net profits of each year taken separately or 20 per cent of the gross value
- Garnets* (used as precious stone) 30 per cent of the net profits of each year taken separately or 15 per cent of the gross value
- Garnet* (abrasive) $7\frac{1}{2}$ per cent of the sale value at the pit's mouth
- Bilaur* (rock crystal) 20 per cent of the net profits of each year taken separately or $12\frac{1}{2}$ per cent of the gross value
- Precious stones other than garnet emerald aquamarine and bilaur* (rock crystal) To be fixed for each lease and not to exceed 50 per cent of the net profits
- Minerals not specified above* 5 per cent of the gross value

Export Duties

- Coal* 4 annas per maund (approx 10s per ton)
- All ores* Re 1 per maund (approx 10s per ton)

Rents under Mining Leases

The minimum annual dead rents payable are as follows

- Coal* 4 annas per acre
- Oil* Re 1 per acre
- Iron* 1 anna per acre
- Gold and silver* Re 1 per acre
- Other minerals and metals* Re 1 per acre

Lessees are not required to pay both royalty and dead rent in respect of any lease only that which shall be the greater

Period and Renewal of Mining Leases

The term of each lease is fixed on its merits by the Durbar

* Thanks are due to the Director of the Geological Survey of India for obtaining the information from which this statement was compiled

issued for lands held under pandaravaka verumpattom, pandaravaka kamam and puravaka tenures, separate clauses are inserted to the effect that the assessment entered in the pattabs represents only the commuted value of the Government's share of the produce on surface cultivation, and that the lands are liable to pay additional assessment if minerals are discovered and worked in them. In most of the title deeds issued by the Diwan for lands settled as mamams, one of the terms is that the rights to metals and minerals are reserved to the State. The Government is entitled to a share in the produce of minerals worked on all assigned lands under whatever tenure held excepting those included in the mam title deeds, from which the condition relating to the reservation to the State of rights to metals and minerals is omitted.

Amount of Royalties and their Assessment

The royalties on coal, coal dust, natural petroleum, natural gas, iron ore, gold and silver, precious stones, and mica are the same as those specified for British India (*see p. 97*)

Oil shale 8 annas per 40 galls of crude oil obtained therefrom

Minerals not specified above 2½ per cent of the sale value, at the pit's mouth or on the surface of the dressed ore or metal convertible at the option of the Local Government to an equivalent charge per ton to be fixed annually or for a term

HYDERABAD DECCAN*

According to Section 63, vol I of H E H the Nizam's Revenue Regulations, the right to all mines vests in the Hyderabad Government, and no person may without permission extract anything from any mine. This section however does not prejudice any rights granted prior to the Regulations coming into force.

The Settlement Regulations (Part I Clause 34) published in the *Hyderabad Government Gazette* dated 14th Isfandar 1315 Fash (22nd August 1906) provide that the rights to mines and mineral products are reserved to the Government but the tenant is allowed to use lime and building stone occurring on his land but he may not trade in these minerals or transport them.

Circular No. 72 applying to all districts is to the effect that if the land is used by the holder he will not be deprived of his right and any new mine shall not be possessed without the special sanction of the Government.

* Thanks are due to the Financial Secretary to H E H the Nizam's Government for kindly furnishing the information from which this statement was compiled.

BIKANER*

Amount of Royalties and their Assessment

Coal The Palana coal mine is worked by the State for internal consumption and no royalty is charged

Sandstone (Dulmera stone) Rs 2 per wagon load, 2 annas per camel load of undressed stone, 3 annas per camel load of dressed stone

Fuller's earth (multani mitti) Rs 7 per ton

Gypsum 3 pies per ton if carried within the State and 5 annas per ton if exported from the State by rail

Export Duties

Fuller's earth (multani mitti) Re 1 per 2½ tons

BONAI†

The ownership and disposal of all mineral products in the State are vested in the Raja of Bonai

Amount of Royalties and their Assessment

Manganese ore 6 annas per ton, with an annual minimum royalty of Rs 2,752 and Rs 1 162 in the case of two leases in force in 1935

Rents under Mining Leases

A surface rent of 4 annas per acre per annum is charged in the case of the two leases to work manganese ore mentioned above

Period and Renewal of Mining Leases

The two leases to work manganese ore, mentioned above, have been issued for a period of 30 years each, with an option of renewal for a further period of 30 years

COCHIN‡

The rights to metals and minerals in all lands, under whatever tenures they are held are reserved to the State, and in the pattaha

* Thanks are due to the Agent to the Governor General in Rajputana for obtaining from the Secretary, Foreign and Political Department, Bikaner State the information from which this statement was compiled

† The information from which this statement was compiled was obtained from the Raja of Bonai

‡ Thanks are due to the Director of the Geological Survey of India for obtaining the information from which this statement was compiled

issued for lands held under pandaravaka verumpattom, pandaravaka kanam and puravaka tenures, separate clauses are inserted to the effect that the assessment entered in the pattahs represents only the commuted value of the Government's share of the produce on surface cultivation, and that the lands are liable to pay additional assessment if minerals are discovered and worked in them. In most of the title deeds issued by the Diwan for lands settled as mamams, one of the terms is that the rights to metals and minerals are reserved to the State. The Government is entitled to a share in the produce of minerals worked on all assigned lands under whatever tenure held, excepting those included in the mam title deeds, from which the condition relating to the reservation to the State of rights to metals and minerals is omitted.

Amount of Royalties and their Assessment

The royalties on coal, coal dust, natural petroleum, natural gas, iron ore, gold and silver, precious stones, and mica are the same as those specified for British India (*see p. 97*)

Oil shale 8 annas per 40 galls. of crude oil obtained therefrom

Minerals not specified above 2½ per cent. of the sale value, at the pit's mouth or on the surface, of the dressed ore or metal convertible at the option of the Local Government to an equivalent charge per ton, to be fixed annually or for a term

HYDERABAD DECCAN*

According to Section 63, vol. I of H E II the Nizam's Revenue Regulations, the right to all mines vests in the Hyderabad Government, and no person may without permission extract anything from any mine. This section however, does not prejudice any rights granted prior to the Regulations coming into force.

The Settlement Regulations (Part I Clause 14) published in the *Hyderabad Government Gazette*, dated 14th Isardar, 1316, Fash (22nd August, 1906), provide that the rights to mines and mineral products are reserved to the Government, but the tenant is allowed to use lime and building stone occurring on his land, but he may not trade in these minerals or transport them.

Circular No. 72, applying to all districts is to the effect that if the land is used by the holder he will not be deprived of his right, and any new mine shall not be possessed without the special sanction of the Government.

* Thanks are due to the Financial Secretary to H E II the Nizam's Government for kindly furnishing the information from which this statement was compiled.

Amount of Royalties and their Assessment

Coal 5 per cent of sale value at the pit's mouth, subject to a minimum of 2 Halli Sicca annas per ton

Oil 8 Halli Sicca annas per 40 galls

Iron ore 1 Halli Sicca anna per ton

Copper, tin, lead or other metals $2\frac{1}{2}$ per cent of the gross value in a finished state

Manganese 1 Halli Sicca anna per ton of ore

Gold or silver 5 per cent of the gross value in a finished state
There is an instance of reduction of rate of royalty from 5 per cent to $2\frac{1}{2}$ per cent in a case when the lessees were working the mine at a loss

Precious stones Not to exceed 30 per cent of the value

Mica $2\frac{1}{2}$ per cent of the gross value in a finished state

Corundum and garnet for commercial use 10 per cent of the gross value in a finished state

Steatite $2\frac{1}{2}$ per cent of the gross value in a finished state

Graphite $2\frac{1}{2}$ per cent of the gross value

China clay 1 Halli Sicca rupee per ton

Marble 2 Halli Sicca rupees per ton

Other products 5 per cent of the gross value

Besides the above rates of royalty on coal there are cases in which the royalties vary—e.g., in the case of the Singareni Collieries Co., Ltd., it is 2 Halli Sicca annas per ton less 10 per cent consumption on coal won, whereas the royalty in respect of the Hyderabad Deccan Co., Ltd., is 5 per cent on the total sales (standard royalty), subject to a minimum of 4 Halli Sicca annas per ton of output less the amount of coal consumed on the mines during the year. It is also provided that the total royalty payable in respect of any year shall in no case exceed 20 per cent of the gross profit of the company for the year, and the company shall be entitled to retain for its own purposes any amount by which the standard royalty for the year shall exceed the maximum royalty.

For all gold, silver and connected minerals and other substances (that is, those intermixed with and usually and properly worked with the said mines, beds, seams, veins and deposits of gold and silver extracted from the ores), when sold, 5 per cent on the amount of the net proceeds of the sale thereof, in calculating which net proceeds the following, and no other expenses shall first be deducted
(a) Freight—i.e., cost of and incidental to carriage from the mines

to the markets (b) insurance (c) assaying, (d) refining and (e) brokerage stamps and petty contingent charges connected with the foregoing

In calculating the net proceeds of sale above referred to, the company shall in respect of all gold and silver sold by them in a manufactured form or otherwise than in the raw state be entitled to deduct in addition to the deductions enumerated above from the sums actually received by the company for such manufactured gold and silver a sum equivalent to the actual cost of manufacturing such gold and silver into the form in which they are actually sold together with a sum equivalent to 10 per cent of the sums actually received by the company for such manufactured gold and silver

Rents under Mining Leases

	<i>Minimum Dead Rent per Acre per Annum</i>
<i>Coal lignite oil copper tin lead mica corundum garnet steatite manganese</i>	4 Halli Sicca annas
<i>Gold and silver and precious stones</i>	Re 1
<i>Other minerals</i>	1 Halli Sicca anna

Lessees are not called upon to pay both dead rent and royalty in respect of the same lease but pay whichever is the greater amount

Period and Renewal of Mining Leases

A lease may be granted for a first term not exceeding 30 years and may be renewed for a similar period

JAIPUR*

The ownership of all minerals in the State is vested in the Durbar

Amount of Royalties and their Assessment

Royalties as provided for by the Rules for the Grant of Licences to Prospect for Mines and of Mining Leases in Jaipur State are as follows

Coal (exclusive of dust and coal used on the works) 5 per cent of the sale value at the pit's mouth with a minimum of 2 annas per ton

Coal dust Half the rates fixed for coal

* Thanks are due to the Agent to the Governor General in Rajputana for kindly supplying the information from which this statement was compiled

Oil 8 annas per 10 galls or 5 per cent of the gross value

Iron 1 anna per ton of ironstone

Copper tin lead zinc, cobalt, nickel, aluminium, and mercury $7\frac{1}{2}$ per cent of the profits* of each year taken separately or 5 per cent of the gross value, at the option of the Durbar

Gold and silver 10 per cent of the profits of each year taken separately or 5 per cent of the gross value, at the option of the Durbar

Soapstone Not to exceed 6 annas per maund (approx 15s per ton), to be fixed for each case

Mica 10 per cent of the sale value at the pit's mouth

Emerald 50 per cent of the net profits of each year taken separately or 25 per cent of the gross value

Aquamarine 40 per cent of the net profits of each year taken separately or 20 per cent of the gross value

Beryl and garnets used as precious stones 30 per cent of the net profits of each year taken separately or 15 per cent of the gross value

Bilaur (rock crystal) 20 per cent of the net profits of each year taken separately or $12\frac{1}{2}$ per cent of the gross value

Garnet for abrasive purposes $7\frac{1}{2}$ per cent of the sale value at the pit's mouth

Precious stone other than garnet emerald aquamarine and bilaur (rock crystal) To be fixed for each lease and not to exceed 50 per cent of the net profits in any case

Minerals not specified above 5 per cent of the gross value

The Durbar reserve the right to alter the royalty by negotiation between themselves and the lessee. Thus the rate on soapstone in a certain case was recently lowered to Rs 5 per ton in order to encourage the industry.

Rents under Mining Leases

The minimum annual dead rents payable are as follows

Coal 4 annas per acre

Oil Rs 1 per acre

Gold and silver Rs 1 per acre

Iron 1 anna per acre

Other metals or minerals Rs 1 per acre

Lessees are not required to pay both royalty and dead rent in respect of any lease, only that which shall be the greater

* Profits. See British India p 97 (footnote)

Period and Renewal of Mining Leases

As a rule the Durbar favours short term mining or quarry leases which do not contain any special provisions in regard to terms for renewal, but such applications by the holders are stated usually to receive favourable consideration

JAISALMER*

The ownership of all minerals in the State is vested in the Durbar.

Amount of Royalties and their Assessment

There is no system, at present, of directly levying royalties on minerals at the place of production. The following combined amounts for royalty and duty are levied

Gypsum, fuller's earth and ochre 1 anna per bag of 4 maunds or 7 annas per ton

Export Duties

The export duty in building stones and marbles has, with effect from 1st March, 1933, been reduced from 6 annas to 2 annas per maund to encourage the mining industry, and the combined royalty and export duty on impure gypsum, fuller's earth and ochre is 1 anna per bag of about 4 maunds (approx 7½d per ton)

Rents under Mining Leases

At present there are no fixed rents in respect of mining or quarry leases, each case being considered on its merits by the Durbar

Period and Renewal of Mining Leases

No special provision exists at present in regard to the terms upon which the renewal of mining leases is granted for mines which have been developed and worked by the lessees for a number of years, as no necessity for making such provision has, so far, arisen

JAMMU AND KASHMIR†

The ownership of all minerals and all mines vests in the Kashmir Government, prospecting for or mining of minerals cannot be carried on within the territories of His Highness the Maharaja Bahadur of Jammu and Kashmir except under a licence or a lease

* Thanks are due to the Agent to the Governor General in Rajputana for kindly furnishing the information from which this statement was compiled

† Thanks are due to the Mineral Survey Officer, Jammu and Kashmir, for kindly furnishing the information from which this statement was compiled

granted under rules by Government or by such authority to whom Government may delegate powers in this behalf from time to time

Amount of Royalties and their Assessment

Royalty has to be paid on all minerals won irrespective of a sale being effected

Coal and lignite 5 per cent of the sale value at the pit's mouth, with a minimum of 4 annas per ton Coal dust pays half the above rates

Petroleum 5 per cent of the well head value, convertible at the option of the Government to an equivalent charge per 40 galls, to be fixed annually, subject to a minimum charge of 8 annas per 40 galls

Natural gas 8 annas per 1,000 cu ft

Iron ore 1 per cent of the sale value of the dressed ore or metal at pit's mouth or on the surface, convertible at the option of the Government to an equivalent charge per ton, to be fixed annually or for a term

Copper, tin, lead, zinc, nickel, bismuth, aluminium, and mercury ores 2½ per cent of the sale value of the dressed ore or metal at pit's mouth or on the surface convertible at the option of the Government to an equivalent charge per ton, to be fixed annually or for a term

Gold and silver 5 per cent of the sale value of the dressed ore or metal at pit's mouth or on the surface, convertible at the option of the Government to an equivalent charge per ton, to be fixed annually or for a term

Mica 2½ per cent of the sale value of the dressed mineral at pit's mouth or on the surface, convertible at the option of the Government to an equivalent charge per ton, to be fixed annually or for a term

Precious stones Not less than 30 per cent of the gross value, subject to special rates which the Government may determine from time to time

China clay (crude) Rs 1 per ton

China clay (washed) Rs 2 per ton

Ochres 1 anna per cwt

Steatite Rs 1¼/- per ton

Other metals and minerals 5 per cent of the sale value at pit's mouth or on the surface, convertible at the option of the Government to an equivalent charge per ton, to be fixed annually or for a term

Rents under Mining Leases

The lessee of a mining lease is required to pay a fixed dead rent at a rate not exceeding Rs 5 per acre per annum, and not less than the minimum specified below on the whole or any portion of the mining block, as the Government may, in the event of their being not satisfied with the operations conducted under the lease or with the results thereof, decide to levy for any particular year, provided that no lessee shall pay both royalty and dead rent in respect of the same lease, but only such one of them as may be of the greater amount

A minimum dead rent of Re 1 per acre per annum is payable in respect of coal, gold, silver, oil, and all other minerals or metals. The maximum dead rent leviable is Rs 5 per acre

Period and Renewal of Mining Leases

His Highness' Government have two forms of licence one is a prospecting licence which is generally granted for 2 years in the first instance but the licensee has the right either to renew it for 1 or 2 years, or to have a mining lease for a period not exceeding 25 years, and the leases are renewed for a period not exceeding 10 years. The periods for leases for precious and semi precious stones and precious metals are decided by the Government on their merits

JODHPUR*

The ownership of all minerals found within the Marwar territory vests in the Jodhpur Government. In cases of building stone and kankar, however, Jaghirdars in whose Jaghir the above minerals are found are allowed to take as much stone or kankar as they require for their own use or for the use of their ryots free of royalty

Amount of Royalties and their Assessment

Royalties leviable are as follows

Ilolfram Rs 40 per ton up to 10 tons Rs 30 per ton from 11 to 20 tons and Rs 25 per ton over 20 tons per annum

Limestone 6 pies per maund (approx 1s 3d per ton)

Selenite 9 pies per maund (approx 1s 10½d per ton)

Gypsum 6 pies per maund up to 1,200 wagons per annum, 4 pies per maund from 1,201 to 1 800 wagons and 3 pies per maund over 1 800 wagons per annum (wagon=272 maunds)

* Thanks are due to the Agent to the Governor General in Rajputana for kindly furnishing the information from which this statement was compiled.

Tuller's earth Rs 126 per wagon up to 150 wagons per annum and Rs 102 per wagon over 151 (approx 19s and 15s respectively per ton)

Sandstone or building stone 2 pies per maund (approx 5d. per ton)

Kankar 1 pie per maund

Marble (chips or ballast) 1 anna per maund (approx 2s 6d per ton)

Rents under Mining Leases

Rents are fixed by tender and are payable in addition to any sums due for royalty

Period and Renewal of Mining Leases

Most of the mineral worked in this State is obtained from quarries, leases to work which are issued for periods not exceeding 30 years

KEONJHAR*

The ownership of minerals is vested wholly in the Ruler of the State

Amount of Royalties and their Assessment

Manganese ore 6 annas per ton

Manganiferous iron ore Usually 4 annas per ton

Iron ore 1 anna per ton upwards, sometimes varying according to the price of imported pig iron

Dolomite 2 annas 6 pies per ton

Rents under Mining Leases

Dead rent does not depend solely on the acreage leased, and in some cases it is increased in amount periodically from the expiration of the second year of the lease

Period and Renewal of Mining Leases

Mining leases are usually issued for a first term of 30 years. In some cases provision is made in the lease for one or more renewals. If the lessees are desirous of taking a renewed lease for two further terms of 30 years each, six calendar months' previous notice in writing must be given to the lessor before the termination of the lease. Renewals are made at such rents and minimum royalties not

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exceeding twice the rents for the last 10 years of the preceding term and at such royalties as may be prescribed from time to time by the Government of India but otherwise upon the like terms and under and subject to the like covenants and agreements contained in the lease (expressly including in the first renewed lease, but not in the second, the present covenant for renewal)

KHARSAWAN*

The mining rights are vested in the ruler of the state and no private person has any mining right

Amount of Royalties and their Assessment

Kyanite The rate is Re 1 per ton when the sterling price of the raw mineral in London is £3 or under per ton. An additional royalty of 1 anna per ton is charged for each 4s by which the above price exceeds £3 per ton

Rents under Mining Leases

Surface rent is paid at the rate of the prevailing settlement rate which varies from 4 annas to Rs 4 per annum

Period and Renewal of Mining Leases

The major portion of the area where kyanite is found has been leased for a period of 30 years from 1st February 1925 with the option of a renewal for a further term of 30 years on a rent not exceeding double that provided for in the current lease

KOREA†

The right to minerals is vested in the Ruler of the State

Amount of Royalties and their Assessment

Coal 5 per cent of the sale value or 2 annas per ton (whichever shall be the greater) and one half of this rate in the case of coal dust

The three collieries working in 1935 were owned by the Ruling Chief of the State

* " " " "

† The settlement was completed
 † Thanks for the information
 given for
 compilation

Rents under Mining Leases

Dead rents are fixed by agreement. Leases sometimes provide for the rent to be increased after the third year. When the amount payable as royalty in any half year equals the amount due as dead rent for that period, the latter ceases to be payable.

Period and Renewal of Mining Leases

Mining leases for coal are issued for a first term of 30 years and are renewable according to the conditions laid down therein after the expiry of the term.

MAYURBHANJ*

The right to minerals whether found in State lands or in the lands of private persons, is vested in the Ruler.

Amount of Royalties and their Assessment

There are no fixed rates for royalties on minerals the amounts being arrived at from a consideration of those in force in British India taking into account local circumstances.

Rents under Mining Leases

There are no fixed dead rents each case being considered on its merits.

For lands assessable under the rent law of the State a yearly surface rent equal to the rate of rent assessable on such land at the date of the lease is charged. For unassessed lands the surface rent charged depends on the circumstances of each case.

Period and Renewal of Mining Leases

The period of mining leases and conditions for their renewal are determined by agreement in each case.

MEWAR (UDIAPUR)

The right to all minerals in the State is vested in the Durbar.

Amount of Royalties and their Assessment

Soapstone 3 annas 5 pies per maund (approx 7s 10d per ton)

Mica 7½ per cent *ad val*

Talc Rs 2 per ton

* Thanks are due to the Director of the Geological Survey of India for obtaining from the Dewan Mayurbhanj State through the Eastern States Agency, the information from which this statement was compiled.

Export Duties

Mica 8 annas per maund (approx 20s per ton)

Rents under Mining Leases

Leases usually provide for a minimum (or dead) rent

Period and Renewal of Mining Leases

The term for which a mining lease may be granted may not exceed 30 years, but the lease may contain a clause permitting renewal for a period not exceeding 30 years, subject to such royalty and conditions as the *Mehkma Khas* may order

MYSORE*

The mineral right vests absolutely in the Government, but in some special cases of alienated holdings, such as *Inams*, *Jaghirs*, etc., wherein the claim to the mineral rights had been established by the holders of such at the time of the *Inam Settlement* in virtue of any previous special grants or other instruments of transfer, the mineral rights vest in the owners of such alienated holdings

Amount of Royalties and their Assessment

Chromite, magnesite, manganese ores, etc 5 per cent of the sale value of the ore on the mining block, convertible annually or for a fixed term at the option of Government, into an approximately equivalent charge per ton, subject to the following minimum charges

	<i>Per Ton</i>		
	<i>Rs a p</i>		
<i>Chromite kyanite and staurolite</i>	1	8	0
<i>Raw magnesite, crude china clay and lime stone</i>	1	0	0
<i>Calcined or dead burnt magnesite and prepared china clay</i>	2	0	0
<i>Manganese ore all grades</i>	0	10	0
<i>Soapstone</i>	1	4	0
<i>Quartz and felspar</i>	0	8	0
<i>Garnets</i>	0	12	0

Gold and silver 5 per cent of the gross sale value for each year in which the lessee makes a net profit from the operations. If the profits in any calendar year exceed £25 000 the lessee pays an

* Thanks are due to the Director Mysore Geological Department, for kindly furnishing the information from which this statement was compiled

additional royalty of 5 per cent of all net profits in excess of £25,000. In the case of a duly registered company, the words "divisible profits" may, at the discretion of the lessors, be substituted for "net profits".

"Net profits" mean the excess of the revenue which is wholly derived from the sale of the mineral or minerals specified over expenditure after all costs and expenses chargeable to the actual working and management of the mine have been included. But neither depreciation, amortization, directors' fees, nor any revenue or expenditure obtained or incurred on account of share or capital transactions or by trading, shall be brought into account, provided that the fees of such Director or Directors as may actually direct technical operations and are specifically denoted as Managing Director or Directors may be included in the expenditure.

"Divisible profits" shall be declared dividends and bonuses or other payments made out of net profits to or on behalf of the shareholders and interest on debentures.

Precious stones 30 per cent of the net profits of each year taken separately.

Minerals not specified above 5 per cent of the sale value at the pit's mouth or on surface of the dressed ore or metal, convertible at the option of the lessors to an equivalent charge per ton, to be fixed annually or for a term.

Royalties are levied in the case of gold only when the year's working of the mine results in a net profit but for other minerals royalty becomes due as soon as the ore is removed from the mining block.

Rents under Mining Leases

Both rent and royalty are payable on a mining lease. Dead rent must not exceed Rs 5 per acre per annum.

Period and Renewal of Mining Leases

Gold New mining leases are issued for a first term of 20 years, renewable for a further period upon such terms as the lessors may prescribe.

Other minerals New leases are issued for a period of 10 years, but some old leases have been issued for terms of 30 years.

Recently, the four companies operating in the Kolar Goldfield secured renewals of their leases. The terms of the new leases, which will be granted for 30 years beginning in 1940, provide for a royalty of 5 per cent as now, on the net sale proceeds of the gold produced and for a further royalty on profits varying with the rate of dividend paid. This royalty will be a percentage on the amount of the dividends paid or on the "adjusted profit" whichever is the greater. "Adjusted profit" will be calculated by deducting from the total income the revenue expenditure plus 15 per cent of that

expenditure, interest on investments profit on sale of investments, provident fund payments, transfer fees The percentage of the royalty will rise under a sliding scale from $2\frac{1}{2}$ per cent when the dividend paid is under 7 $\frac{1}{2}$ per cent up to 35 per cent when the dividend is over 85 per cent but under 100 per cent When the dividend is 100 per cent or over, the royalty will be 40 per cent

PUDUKKOTTAI STATE*

Amount of Royalties and their Assessment

Coal (exclusive of dust and coal used on the works) 1 anna per ton

Oil 8 annas per 40 galls or 5 per cent *ad val*

Gold or silver $7\frac{1}{2}$ per cent of the net profits of each year taken separately

Iron 1 anna per ton of ironstone

Copper, tin, lead or other metals $2\frac{1}{2}$ per cent of the sale value at the pit's mouth or on the surface of the dressed ore or metal convertible at the option of the lessee to an equivalent charge per ton, to be fixed annually or for a term

Precious stones 30 per cent of the net profits of each year taken separately

Rents under Mining Leases

The dead rents (minimum) payable are as follows

Coal 4 annas per acre per annum

Oil Re 1 per acre per annum

Iron 1 anna per acre per annum

Gold or silver Re 1 per acre per annum

Other metals Re 1 per acre per annum

Both royalty and dead rent are not payable in respect of the same lease only that which is the greater

Period and Renewal of Mining Leases

A mining lease may be granted for a term not exceeding 30 years

REWA

The ownership of all minerals and mineral products found in the State is vested in the Ruler

* Thanks are due to the Director of the Geological Survey of India for obtaining from the District Pudukkottai State through the Agent to the Governor General Madras States the information from which this statement was compiled

Amount of Royalties and their Assessment

Rates are not prescribed, but are subject to negotiation between the Durbar and the lessee. The following are examples of rates which have been levied.

Coal 4 to 6 annas per ton for run of mine coal, with rates as low as 1 anna per ton for coal dust.

Limestone From 1 anna to 2 annas 6 pies per ton, the lower rate being for ballast.

Rents under Mining Leases

There is no prescribed scale for dead or surface rents, the terms being arranged by negotiation between the lessee and the Durbar.

Period and Renewal of Mining Leases

Leases are generally granted for a period of 25 years. A renewal for a further period is subject to a revision of the rates.

SANDUR*

The ownership of minerals and mineral products is vested in the Ruler of the State.

Amount of Royalties and their Assessment

The royalties on ores now being worked are as follows:

Iron earth ore $\frac{1}{2}$ anna per ton

Manganese and manganiferous ores 7 annas per ton

Red earth ore 3 annas per ton

Rents under Mining Leases

The dead rent generally charged is Rs. 1 per acre, but in the case of one lease for manganese, manganiferous and iron ores over an area of about 21 sq. miles, the dead rent is Rs. 25,000 per annum.

Period and Renewal of Mining Leases

The period of a mining lease varies. Three leases for manganese, manganiferous and iron ores were granted for a period of 25 years from 1st January, 1929. A lease for red earth ore was granted for a period of 10 years from 1st July, 1931. The leases do not contain any provision for renewal.

* Thanks are due to the Director of the Geological Survey of India for obtaining from the Sanjur Durbar, through the Agent to the Governor General, Madras States, the information from which this statement was compiled.

SHAHPURA

Garnet and mica mines have been worked, the State taking a proportion of the output as royalty. Thus, on mica the lessee pays 13 seers per maund of output. Mineral leases are put up to auction, and sold to the highest bidder.

TALCHER*

The mines and mineral resources are vested wholly in the Ruler of the State and cannot be owned by private persons.

Amount of Royalties and their Assessment

The royalty charged on coal in the case of a lease granted in 1921 to the East India Prospecting Syndicate is 2 annas per ton. The lease was granted at this rate of royalty in order to procure the construction of a railway line into the coalfield. This syndicate in turn receives a royalty of 8 annas per ton from some of its lessees.

Rents under Mining Leases

Surface rent is charged at the rate of Rs. 5 per acre per annum.

The minimum dead rent is as follows: Re. 1 per acre per annum for 2 years from the date of the receipt of Government sanction of the lease, Rs. 2 per acre per annum for the next 3 years, Rs. 5 per acre per annum for 6 years following, and Rs. 7-8 0 per acre per annum onwards.

Period and Renewal of Mining Leases

A coal mining lease was granted to the East India Prospecting Syndicate in 1921 over 5,000 acres for 30 years, with an option for a further period of 30 years. In 1924, the Talcher Coalfield Ltd. took over the Syndicate's mining rights over this land by way of transfer, and granted, with the permission of the State, sub leases to the Bengal Nagpur Ry. Co., Ltd., and the Madras and Southern Mahratta Ry. Co., Ltd., in respect of portions of the leased area. The Ruler has agreed to grant to these two sub lessees direct leases for 30 years after the expiry of the East India Prospecting Syndicate's lease. The terms on renewal include (i) double the rate of royalty of the first 30 years or 5 per cent. of the pit mouth value of coal, which is expected to be not more than 6 annas per ton or less than 4 annas, and (ii) double the rate of surface rent—i.e., Rs. 10 per acre per annum, and (iii) double the rate of dead rent—i.e., Rs. 15 per acre.

* Thanks are due to the Director of the Geological Survey of India for obtaining the information from which this statement was compiled.

TRAVANCORE*

The proprietary right over the minerals and metals in the State is vested in the Government, by whomsoever and whatever tenure the lands may be held. The minerals and metals cannot be enjoyed, sold, leased or otherwise appropriated, except with the permission of Government. There is also a notification by Government prohibiting prospecting for or mining of metals and minerals, whether in Sirkar or private lands, except under a licence from Government. Private persons in whose lands the metals and minerals may occur have only a surface right over their lands—i.e., they are owners only of the soil and not the minerals. Provisions have been made for the acquisition of land and for the payment of compensation to holders of private lands for damage caused as the result of the mining operation.

Amount of Royalties and their Assessment

Coal (exclusive of dust and coal used on the works) 1 anna per ton

Oil 8 annas per 40 galls or 5 per cent *ad val* on gross value

Iron $\frac{1}{2}$ anna per ton of ironstone

Copper, tin, lead or other metals $2\frac{1}{2}$ per cent of the sale value, at the pit's mouth or on the surface of the dressed ore or metal, convertible at the option of the lessee to an equivalent charge per ton, to be fixed annually or for a term

Gold or silver $7\frac{1}{2}$ per cent of the net profits of each year taken separately

Precious stones 30 per cent of the net profits of each year taken separately

Monazite Rs 40 (British India) per ton of monazite extracted from the premises if the market selling price varies between £25 and £20 per ton

Zircon Rs $7\frac{1}{2}$ (British India) per ton extracted from the leasehold if the selling price varies between £10 and £8 per ton

Ilmenite Re 1 (British India) per ton extracted from the premises if the selling price varies between £2 and £3 10s per ton

Rents under Mining Leases

The lessee pays for every year after the first, a fixed yearly dead rent at a rate not less than that laid down in the following schedule, provided that no lessee shall pay both royalty and dead rent in

* Thanks are due to the Director, Geological Survey of India, for obtaining from the Director of Industries, Travancore, through the Agent to the Governor General, Madras States Travancore, the information from which this statement was compiled.

respect of the same lease, but only one of them as may be of the greater amount

	<i>Mining Surface Rent per Acre</i>	<i>Dead Rent per Acre (minimum)</i>
<i>Coal</i>	A moderate rent not exceeding 1 rupee per acre or any fraction of an acre	4 annas
<i>Oil gold silver, iron or other metals</i>	Ditto	1 rupee

Period and Renewal of Mining Leases

A mining lease may be issued for a period not exceeding 30 years

STRAITS SETTLEMENTS*†

The ownership of minerals is in the Crown subject to rights by alienation or licence. Private mining on alienated land is at present confined to phosphates on Christmas Island and to tin in Malacca.

Amount of Royalties and their Assessment

Minerals on alienated land In every grant or lease made by the Crown after 3rd May 1907 there is implied (in the absence of an express provision to the contrary) a reservation to the Crown of the right to take any mineral oil which may be found and of a royalty of 10 per cent of the gross produce of all mines and minerals other than laterite which may be found therein.

Minerals from Crown land

Settlement of Singapore Royalties in force include the following

<i>Laterite</i>	5 cents per cu yd
<i>Granite (rubble)</i>	4 cents per cu yd
<i>Granite (squared)</i>	5 cents per cu ft
<i>Granite (dressed)</i>	6 cents per cu ft

In Singapore granite quarries on Crown land have been rented recently by the tender system under temporary occupational licences and royalty has been paid in advance on an estimated output.

Settlement of Malacca Royalties in force include the following

* Thanks are due to the Acting Colonial Secretary, Straits Settlements for kindly furnishing the information from which this statement was compiled.

† Including Singapore, Christmas Island, Malacca, Penang (with Province Wellesley) and Labuan.

TRAVANCORE*

The proprietary right over the minerals and metals in the State is vested in the Government, by whomsoever and whatever tenure the lands may be held. The minerals and metals cannot be enjoyed, sold, leased or otherwise appropriated, except with the permission of Government. There is also a notification by Government prohibiting prospecting for or mining of metals and minerals, whether in Sirkar or private lands, except under a licence from Government. Private persons in whose lands the metals and minerals may occur have only a surface right over their lands—i.e., they are owners only of the soil and not the minerals. Provisions have been made for the acquisition of land and for the payment of compensation to holders of private lands for damage caused as the result of the mining operation.

Amount of Royalties and their Assessment

Coal (exclusive of dust and coal used on the works) 1 anna per ton

Oil 8 annas per 40 galls or 5 per cent *ad val* on gross value

Iron $\frac{1}{2}$ anna per ton of ironstone

Copper, tin, lead or other metals 2 $\frac{1}{2}$ per cent of the sale value, at the pit's mouth or on the surface, of the dressed ore or metal, convertible at the option of the lessee to an equivalent charge per ton, to be fixed annually or for a term

Gold or silver 7 $\frac{1}{2}$ per cent of the net profits of each year taken separately

Precious stones 30 per cent of the net profits of each year taken separately

Monazite Rs 40 (British India) per ton of monazite extracted from the premises if the market selling price varies between £25 and £20 per ton

Zircon Rs 7 $\frac{1}{2}$ (British India) per ton extracted from the lease hold if the selling price varies between £10 and £8 per ton

Ilmenite Re 1 (British India) per ton extracted from the premises if the selling price varies between £2 and £3 10s per ton

Rents under Mining Leases

The lessee pays for every year after the first, a fixed yearly dead rent at a rate not less than that laid down in the following schedule, provided that no lessee shall pay both royalty and dead rent in

* Thanks are due to the Director Geological Survey of India for obtaining from the Director of Industries Travancore through the Agent to the Governor General Madras States, Trivandrum, the information from which this statement was compiled

respect of the same lease, but only one of them as may be of the greater amount.

	<i>Mining Surface Rent per Acre.</i>	<i>Dead Rent per Acre (minimum).</i>
Coal	A moderate rent not exceeding 1 rupee per acre or any fraction of an acre.	4 annas.
Oil, gold, silver, iron or other metals	Ditto.	1 rupee.

Period and Renewal of Mining Leases

A mining lease may be issued for a period not exceeding 30 years.

STRAITS SETTLEMENTS*†

The ownership of minerals is in the Crown subject to rights by alienation or licence. Private mining on alienated land is at present confined to phosphates on Christmas Island and to tin in Malacca.

Amount of Royalties and their Assessment

Minerals on alienated land In every grant or lease made by the Crown after 3rd May, 1907, there is implied (in the absence of an express provision to the contrary) a reservation to the Crown of the right to take any mineral oil which may be found and of a royalty of 10 per cent of the gross produce of all mines and minerals other than laterite which may be found therein

Minerals from Crown land

Settlement of Singapore Royalties in force include the following

Laterite 5 cents per cu yd

Granite (rubble) 4 cents per cu yd

Granite (squared) 5 cents per cu ft

Granite (dressed) 6 cents per cu ft

In Singapore, granite quarries on Crown land have been rented recently by the tender system under temporary occupational licences and royalty has been paid in advance on an estimated output.

Settlement of Malacca Royalties in force include the following

* Thanks are due to the Acting Colonial Secretary, Straits Settlements, for kindly furnishing the information from which this statement was compiled

† Including Singapore, Christmas Island, Malacca, Penang (with Province Wellesley), and Labuan

<i>Ironstone</i>	$\frac{3}{4}$ cent per cu ft
<i>Laterite</i>	1 cent per cu ft
<i>Granite (rubble)</i>	2 cents per cu ft
<i>Granite (squared)</i>	5 cents per cu ft
<i>Granite (dressed)</i>	6 cents per cu ft

Rents under Mining Leases

Straits Settlements, excluding Labuan

Alluvial mining licences These are issued for Crown lands for a maximum term of one year expiring 31st December at such rentals as the Government may determine

Mining leases A mining lease does not convey the right to work oil shale or mineral oils nor to remove granite, limestone, laterite coral shell guano sand loam or clay beyond the boundaries of the land leased. The rent which is payable in addition to royalty, is determined by the Government in each case

Period and Renewal of Mining Leases

Straits Settlements (excluding Labuan) If the lessee gives notice of his desire for renewal at least 12 months before the expiration of the current term of his lease he is granted a renewal if he proves to the satisfaction of the Commissioner of Lands or the Resident Councillor that he has consistently complied with the obligations of his lease

Labuan Leases are governed by Ordinance No 127 and all Crown lands distinguished into town suburban and country lands, are disposed of by lease for terms of 999 years or such shorter terms as the Governor may determine

FEDERATED MALAY STATES*

The ownership of land and the minerals therein is in the State until such time as a mining lease is issued to a private individual or company

Amount of Royalties and their Assessment

Royalties on metals and minerals are mostly levied in the form of export duties

* Thanks are due to the Senior Warden of Mines, Federated Malay States for kindly furnishing the information from which this statement was compiled

Coal The one colliery working pays a royalty of 25 cents per ton

Tin If smelted or manufactured from tin ore won in the Federated Malay States, the royalty is as follows

When the price of tin does not exceed \$67 per pikul (133½ lb), \$23 per bhara (400 lb), when the price exceeds \$67, but does not exceed \$68, \$23 50 per bhara, when the price exceeds \$68, but does not exceed \$69, \$24 per bhara, and so on, the duty per bhara being increased by 50 cents for every \$1 by which the price of tin exceeds \$67

Tin ore 72 per cent of the duty on tin, with, in the case of tin ore exported otherwise than under such guarantees as the Chief Secretary may require that it shall be smelted in the Straits Settlements, Australia or the United Kingdom, an additional duty of \$30 per pikul

In addition to the existing *ad val* duty a further duty of 5 cents per pikul is levied on all tin ore exported. This duty is devoted to defraying the expenses incurred in connection with Tin Restriction.

The tin contents are taken, without assay to be 72 per cent, and as a measure of protection of the local smelting companies there is the additional duty of \$30 per pikul (=£60 per ton) on all ore not guaranteed as required. The duty is collected at the ports (Federated Malay States), or in the case of tin or ore exported by rail, in Singapore or Penang.

A further cess of 5 cents per pikul of tin ore (equivalent to about 2s per ton of ore) has been imposed by way of a contribution to the Tin Research and Propaganda Fund.

Tin slag and hard head of tin At the rate prescribed for tin ore, unless the consignment is accompanied by a certificate of assay granted by the Government Geologist or approved by the Warden of Mines, in which case the duty shall be at the rate prescribed for tin smelted or manufactured on the amount of tin estimated to be contained in such consignment.

Scheelite \$2 per pikul (133½ lb)

Wolfram \$2 per pikul

Gold Export duty on gold or gold dust is 2½ per cent *ad val*

For the purpose of assessing the amount of *ad val* export duty payable under this classification the value of gold will be ascertained as follows

(a) The value of gold obtained by any cyanide process shall be taken at the time of payment of duty to be £2 per oz, and if the amount of duty so paid exceeds or falls short of 21 per cent of
Secreta
deficit.

(b) The value of gold obtained otherwise than by a cyanide process shall be taken at the time of payment of duty to be £4 per oz, and if the amount of duty so paid exceeds or falls short of $2\frac{1}{2}$ per cent of the value as declared in a written certificate from a bank or other authority approved by the Chief Secretary, such excess shall be refunded to or such deficit shall be paid by the exporter, as the case may be

*China clay (kaolin) ** $2\frac{1}{2}$ per cent *ad val*

*Potash felspar or soda felspar** intended for use as a flux or a glaze
 $2\frac{1}{2}$ per cent *ad val*

*China stone ** $2\frac{1}{2}$ per cent *ad val*

All other metals and metalliferous ores 10 per cent *ad val*

Export Duties

Merged in royalties above mentioned. A super tax is paid on ore to be smelted elsewhere than in the British Empire

Miners may obtain relief from some or all of the export duty if they can show that their ore is expensive to win, refractory, or of very low grade

Rents under Mining Leases

Rent is \$1 per acre per annum

Period and Renewal of Mining Leases

The renewal of a mining lease is not a right but in practice all mining leases which are being reasonably worked are renewed except in cases where it is considered unsound, by reason of damage, to allow mining to continue

The period of a lease and any renewals thereof is usually 21 years

TRENGGANU†

Under the land laws of the State the property in all minerals is vested in the Government. There are, however, a number of concessions that are not wholly subject to land and mining laws, such as the Bundi, Sungai Ayam and Chenderong concessions, which were granted before the present Mining Enactment came into force

* The export of these minerals is prohibited except under licence granted by the Chief Secretary

† Thanks are due to the Commissioner of Lands and Mines, for kindly furnishing the information from which this statement was compiled

Amount of Royalties and their Assessment

The Government does not levy royalties on minerals, but certain export duties are in force

Export Duties

Tin ore, wolfram and all other minerals and metalliferous ores 10 per cent *ad val*

The Customs Department publishes a price list from time to time for the purpose of assessing the duty

Rents under Mining Leases

The quit rent is \$1 per acre per annum, but mines which have had to close down temporarily on account of the Tin Restriction Scheme only pay a nominal quit rent of \$1 a year

The premium on a mining lease is \$10 per acre

Period and Renewal of Mining Leases

Usually leases are issued for periods varying from 10 to 25 years. On expiry of a lease its renewal can be considered, but there is no right of renewal

JOHORE*

The ownership of all lands is vested in the Sultanate, and His Highness the Sultan in Council may lease State land for mining purposes for such terms as may be stated in the leases

An ordinary mining lease does not give the right to work oil shale, mineral oil, coal or iron unless this right is conferred in express terms therein

Amount of Royalties and their Assessment

No royalty has, so far, been levied in Johore, although provision is made in the Mining Enactment (Sections 17 and 18), wherein the payment of royalty is an implied obligation on the part of the lessee, and the right to fix royalty on minerals or metals from time to time is also reserved (Section 126). There is no present intention of imposing any royalty, but certain export duties on minerals are in force

* Thanks are due to the Acting Warden of Mines, Johore, for kindly furnishing the information from which this statement was compiled.

Commutation of royalty by a fixed annual payment, called "commutation fee," is provided for in Section 127 of the Mining Enactment, but this has never been imposed

Export Duties

Export duties are fixed by *Gazette* notification under the Trade and Customs Enactment. The current rates are as follows

Tin (smelted or manufactured) When the price of tin

(a) Does not exceed \$41 per pikul, the export duty is \$10 per bhara

(b) Exceeds \$41, but does not exceed \$42 per pikul, the export duty is \$10 50 per bhara

(c) Exceeds \$42, but does not exceed \$43 per pikul, the export duty is \$11 per bhara

And so on, the duty per bhara being increased by 50 cents for every \$1 by which the price of tin exceeds \$41 per pikul

Tin ore 72 per cent of the duty on tin, with an additional duty of \$30 per pikul in the case of tin ore exported otherwise than under such guarantees as the State Secretary may require that it shall be smelted in the Straits Settlements, Australia, or the United Kingdom

Wolfram and scheelite 10 per cent *ad val*

Gold 2½ per cent *ad val*

China clay (or kaolin) 5 per cent *ad val*

All other metals and metalliferous ores 10 per cent *ad val*

Rents under Mining Leases

The premium payable on State land disposed of by auction or tender will ordinarily be the price bid or tendered by the successful bidder or tenderer. The premium payable on land not disposed of by tender or auction, unless His Highness the Sultan in Council otherwise directs, will be at the rate of \$10 per acre. The quit rent for a mining lease or mining certificate is \$1 per acre per annum

Period and Renewal of Mining Leases

The period of mining leases is not laid down by enactment, but is ordinarily 21 years or less

Any lessee desirous of obtaining a renewal of his lease may make a written application for renewal to the Collector at least 12 months before the expiration of the current term of such lease. A new lease may, if His Highness the Sultan in Council thinks fit,

thereupon be granted if the lessee proves to the satisfaction of His Highness the Sultan in Council that he has consistently complied with the covenants and conditions of his lease

KEDAH

The entire property in and control of State land is vested in His Highness the Sultan who with the consent of the State Council may lease such land for mining purposes. The Mining Enactment provides for the issue of general and exclusive prospecting licences

KELANTAN

According to the Land Enactment No 26 of 1926 all tin gold coal petroleum and other minerals are the property of the Government. The Individual Mining and Prospecting Enactment 1933 empowers the Sultan in Council to declare any area excluding alienated land to be an area in which mining may be carried on under permits

PERLIS

It is laid down in Section 5 of the Land Tenure Regulation 1326 that the right to all mines mineral products coal etc is reserved to the State

The Mining Enactment 1340 (No 1 of 1340) provides for the grant of mining leases in respect of State land giving the right to work all metals and minerals found upon or beneath such land and to remove and export the same upon the payment of a fixed royalty. The Enactment also provides for the grant of prospecting licences exclusive prospecting licences and individual passes to work for tin ore in streams

SARAWAK*

The ownership of all minerals is vested in the State. The Superintendent of Lands and Surveys has power to grant prospecting licences and mining leases except for mineral oils coal and antimony. No licence or lease may be granted to any limited company registered outside Sarawak.

Sarawak Oilfields Limited has exclusive rights over mineral oils until 1989

* Thanks are due to the Agent in London to the Sarawak Government for kindly furnishing the information from which this statement was compiled

Amount of Royalties and their Assessment

Gold Royalty *ad val* 10 per cent is payable to the Government of Sarawak on all gold won in an area held under mining lease

Other minerals 5 per cent *ad val*

Rents under Mining Leases

Gold and mercury Annual rental of \$2 per acre or part thereof on all land included in a mining lease

Period of Renewal of Mining Leases

Mining leases of State land may be granted for any period not exceeding 21 years. If at the end of that period the lessee expresses his desire to take a further lease on the same land he will be given the first option provided his mining operations under the previous lease have been conducted to the satisfaction of the Government.

A mining lease for a period not exceeding 21 years (but subject to renewal as above) over alienated land may be granted only to the registered owner of the surface rights under the Land Order.

AUSTRALASIA

COMMONWEALTH OF AUSTRALIA

NEW SOUTH WALES*

In general, it may be stated that all lands within the State of New South Wales are, subject to certain restrictions, open to occupation under the Mining Act, 1906, and subsequent amending Acts

The mining lands of the State fall within two categories—*i e*, Crown lands and private lands. The mining titles which may be granted are

Crown lands Gold mining leases, mineral leases, leases for mining purposes (*i e*, construction of roads, races, dams, buildings, etc.), special leases

Private lands Mining leases (which may include gold and/or minerals), agreements (Section 69, Crown minerals), agreements (Section 70, privately owned minerals), mining purposes leases

Crown lands and private lands Dredging leases (which may be wholly Crown lands, wholly private lands, or Crown and private lands combined)

Gold is reserved to the Crown in respect of all lands, whether owned by the Crown or privately owned. In Crown lands the ownership of the land and the ownership of all the minerals therein vests in the Crown. In private lands the ownership of the minerals (other than gold) is dependent upon the deed of grant issued at the time of alienation, in some cases—*i e*, old grants—the owner in fee simple is also the owner of all the minerals, in other cases certain specified minerals—*i e*, coal, silver, copper, tin, etc.—are reserved to the Crown, the remaining minerals vesting in the owner of the land. In recent alienations and lands in the course of alienation the whole of the minerals are reserved to the Crown.

Prior to the passing of the Mining Amendment Act, 1918, the Crown could only grant a mining title in respect of minerals vested in it, but since the passing of that Act the Crown may grant a mining title in respect of any mineral, whether vested in the Crown or not, except in the case of Part V of the Act (dredging) under which a lease to mine privately owned minerals cannot be granted by the Crown.

The position as regards rents, royalties and renewal of the term of leases is somewhat complicated by the fact that, whereas new leases

* Thanks are due to T. Maughan Esq., for obtaining from the Under Secretary, Department of Mines New South Wales, the information from which this statement was compiled.

are regulated by the Mining Act 1906 and subsequent amendments there are in force a number of leases granted under previous Mining Acts which have been repealed

In these circumstances it seems desirable to deal first with the present day position in regard to each mineral group and then to refer to the conditions prevailing in regard to leases granted under legislation in force before 1935

Amount of Royalties and their Assessment

Coal and Shale

MINING ACT, 1906 AND SUBSEQUENT AMENDMENTS TO END OF 1935

Crown Lands Prior to 18th December 1918 6d per ton on all large coal and shale and 3d per ton on all small coal and thereafter 6d per ton Where mining leases for coal and shale under this Act are renewed the lessees have a choice of royalty rates—i.e. a flat rate of 9d per ton or a sliding scale with coal selling at not more than 10s per ton at the pit's mouth rising to 9d per ton when the price exceeds 15s per ton

Private lands Where the mineral is owned by the Crown the same royalty is payable as for Crown lands Where the coal or shale is not owned by the Crown under the Mining Amendment Acts 1918 and 1924 the royalty is 6d per ton on all coal and shale (allowing deduction of rent paid to the owner of the mineral) Of this sum the Crown retains 1d per ton on the total output from leases under the Act of 1918 and one sixth of the actual Royalty paid on coal won from leases under the Act of 1924 and pays the balance to the owner of the minerals

MINING ACT 1884

Crown lands Prior to 1st July 1918 6d per ton on all large coal and shale and 3d per ton on all small coal subsequently and up to date of renewal 6d per ton Under first renewals same conditions as under Act of 1906 Under further renewals royalty on a sliding scale rising from 7d per ton (on coal selling at not more than 10s per ton at pit's mouth) up to 1s when the price at pit's mouth exceeds 30s per ton

Gold and Minerals other than Coal and Shale

MINING ACT 1906 AND SUBSEQUENT AMENDMENTS TO END OF 1935

Crown lands No royalty on minerals obtained from leases issued prior to 18th December 1918, 1 per cent is payable of the value of all gold or minerals won in any one year after 18th December,

1918 after deducting the annual rent paid for such year, but no royalty is payable where the value of the output in any one year does not exceed £500 first renewals of the leases being granted upon the same conditions

Private lands

Gold leases 1 per cent of the value of the gold won

Mineral leases 1 per cent of the value of the mineral won

In the case of validated leases (Validation Act 1924) the whole of the royalty is paid to the owner of the mineral

MINING ACT, 1906, AS AMENDED BY AMENDMENT ACT 1918

Gold 1 per cent of value to the Crown

Other minerals (except coal and shale) Where not reserved to the Crown, these pay 5 per cent of the net profits from the winning and sale Of this the Crown retains one fifth and pays four fifths to the owner of the minerals In the case of validated leases (Validation Act 1924) the whole of the royalty is paid to the owner of the mineral

MINING ACT 1906 AS FURTHER AMENDED BY THE AMENDMENT ACT 1924

Private lands Gold and silver pay to the Crown 1 per cent of the value won

Other minerals (except coal and shale) pay $1\frac{1}{2}$ per cent of the value of the mineral won other than gold or silver after deducting the annual rent paid Of this amount one ninth is retained by the Crown and eight ninths is paid to the owner of the mineral

MINING ACT 1874

Crown lands

Gold from mining leases pays no royalty under the original lease—i.e. for the first term demised—nor under first renewal of the lease Further renewals at same rates as mineral leases

Mineral leases No royalty under original lease—i.e. first term demised Under first renewals of mineral leases a royalty of 1 per cent on the first £100 000 net profits and thereafter 1½ per cent of the net profits No royalty is payable if the net profits do not exceed £500 Further renewals of mineral leases in addition to the rents received in the lease require the lessee to make an annual payment to the Crown from the net profits arising in any year out of the working of any mine on land comprised within the lease or on land comprised within the lease and any other lease held by the lessee and worked therewith as part of the said mine or arising

from the disposal or treatment of the products of any such mine, in the following manner

(a) Where any such net profits do not exceed £100,000 in any year, 3 per cent of such profits

(b) Where such net profits exceed £100,000, but do not exceed £200 000 in any year, 3 per cent of such profits plus a further 1 per cent on the second £100,000 or part thereof

(c) Where such net profits exceed £200,000 in any year, 3 per cent of such profits plus a further 1 per cent on the second £100,000, plus a further 1 per cent on the third £100,000 or part thereof, and thereafter in the increasing proportion of 1 per cent on each successive £100,000 or part thereof of the balance of such profits

MINING ACT, 1906, AND SUBSEQUENT AMENDMENTS

Dredging leases 1 per cent of the value of minerals won. Royalty is not chargeable in the case of mining purposes leases of Crown or private lands except in the case of a lease for the purpose of treatment of stone tailings, slimes etc., on land formerly held under lease from the Crown and abandoned in which case a royalty is charged, usually 1 per cent

MINING ACTS, 1899 AND 1906

Dredging leases On Crown and private lands for gold or minerals (Crown only) pay a royalty of 1 per cent of the value of all minerals won. Rent being allowed as a deduction against royalty payable under the Act of 1906 only. The same rate is payable on renewals of the lease

MINING ACT, 1906

Gold and minerals other than coal or shale The rate for special leases is fixed by the Governor of the State and is generally 1 per cent of the value of the mineral won, rent being allowed as a deduction against royalty payable. The royalty levied on renewal of the lease is usually at the same rate

AGREEMENTS, MINING ACT, 1906 (SECTION 69)

Crown minerals (including coal and shale) pay the same rates of royalty as those obtained from mining leases on private lands

Private minerals pay such royalty as may be agreed upon between owner and lessee the royalty being paid direct to the owner of the mineral and not through the Crown

Rent merging into royalty The statutory rent paid in any of the cases quoted above may be deducted from the royalty payable in any one year (leases for minerals other than coal and shale under the

Act of 1918 Dredging Leases Act 1899 and further renewals under repealed Acts being excepted)

For this purpose leases of the same category amalgamated may be treated as one lease and the total rents may be deducted

No royalty is payable on gold or mineral leases (Crown lands) in any one year unless the value exceeds (a) the annual rent paid, and/or (b) the statutory exemption of £500 for value of the mineral won has been exceeded

Royalties to private owners of minerals No comprehensive information is available as to royalty paid to private owners, but it is known that several collieries are paying as high as 1s 6d per ton royalty to the estates owning the coal being won, whilst more than one lessee is known to be paying a private royalty on minerals such as limestone and dolomite

Rents under Mining Leases

MINING ACT 1906 AND SUBSEQUENT AMENDMENTS TO END OF 1935

Crown lands

Gold and mineral leases 2s per acre per annum

Leases for mining purposes As may be determined by the Governor (1s to 2s 6d per acre per annum is usually levied)

Special leases As may be determined by the Governor (usually 2s 6d per acre per annum)

Private lands £1 per acre per annum for so much of the surface as is occupied, payable to the owner of the land, or as may be agreed upon between the applicant and the owner of the land In respect of privately owned coal, an additional rent of 2s 6d per acre per annum of the whole of the land leased is payable to the owner of the minerals

Dredging leases On Crown lands, 2s 6d per acre per annum The rate for included private lands is assessed by the Warden in open Court

MINING ACT, 1906 AND SUBSEQUENT AMENDMENTS TO END OF 1935

Crown lands

Coal and Shale Mining leases pay an annual rental of 2s per acre

Private lands Where the coal or shale is owned by the Crown, an annual rental of £1 per acre or part thereof of the surface required only is payable, unless otherwise agreed upon between the owner and
Crown,
part
acre

for the whole area demised is payable to the owner of the mineral

MINING ACT, 1884

Crown lands

Coal and shale The rent varies from 1s to 2s 6d per acre per annum

MINING ACT, 1874

Crown lands

Gold and minerals other than coal and shale Mining lessees pay 5s per acre per annum

MINING ACT, 1906

Crown lands

Gold and minerals other than coal and shale Mining lessees paid 5s per acre to 18th December, 1918, and then 1s per acre to 28th November, 1921, and 2s per acre thereafter

Private lands

Gold and minerals other than coal and shale Mining leases pay £1 per acre or part thereof for the surface required only, unless otherwise agreed upon between the owner and the applicant

MINING ACT, 1906, AS AMENDED BY THE AMENDMENT ACT, 1918

Private lands

Minerals (other than coal and shale) not reserved to the Crown
The rental is £1 per acre per annum or part thereof for the surface required only, unless otherwise agreed upon between the owner and the applicant

MINING ACT, 1906, AS AMENDED BY THE AMENDMENT ACT, 1924

Private lands

Minerals (other than coal and shale) not reserved to the Crown
Mining leases pay a rental of £1 per acre or part thereof per annum for the surface required only, unless otherwise agreed upon between the applicant and the owner

MINING ACT, 1906 (DREDGING LEASES)

Gold or minerals The rental for dredging leases of Crown lands under the above Act and amending Acts to the end of 1935 is 2s 6d per acre per annum. For leases of private land the rate is assessed by the Warden

MINING ACT, 1899 (DREDGING LEASES)

Gold or minerals The rental for dredging leases of Crown lands is £1 per acre per annum up to 17th December, 1902, and thereafter 2s 6d per acre per annum. For leases of private land, as assessed by the Warden

MINING ACT, 1906 (SPECIAL LEASES)

Gold or minerals other than coal and shale The rental is fixed by the Governor of the State

MINING ACT, 1906 AGREEMENTS UNDER SECTION 69 (CROWN MINERALS) AND SECTION 70 (PRIVATE MINERALS)

The rent is fixed by agreement between the owner of the land and the lessee.

Period and Renewal of Mining Leases

MINING ACT, 1906, AND SUBSEQUENT AMENDMENTS TO LAND OR 1935

All leases granted under the Mining Act, 1906, may be for a term not exceeding 20 years, and may be renewed for two further periods not exceeding 20 years each, subject to such rents, royalties, and other covenants and conditions as the Governor may approve. The maximum term under the law as it stands at present is 60 years.

LEASES OF CROWN LANDS GRANTED UNDER ACTS REPEALED BY THE MINING ACT, 1906

Leases of Crown lands granted under any Act repealed by the Mining Act, 1906, may be renewed for three further terms not exceeding 20 years each, thus making the maximum term for this class of lease 80 years, subject to such rents, royalties and other covenants and conditions as the Governor may approve.

VICTORIA*

All gold and silver occurring on or below the surface of land in Victoria is the property of the Crown, as also are all other minerals except on land alienated before 2nd March, 1892.

Amount of Royalty

The only royalties levied under leases or licences issued under the Mines Act, 1928, are in respect of the following:

Coal. A royalty of $\frac{1}{4}$ d per ton for each additional inch of the maximum of the before-mentioned rate (i.e., 1d.) an increase of

* Thanks are due to T. Maughan, Esq., for obtaining from the Secretary, Department of Mines, Victoria, the information from which this statement was compiled.

MINING ACT, 1884

Crown lands

Coal and shale The rent varies from 1s to 2s 6d per acre per annum

MINING ACT, 1874

Crown lands

Gold and minerals other than coal and shale Mining lessees pay 5s per acre per annum

MINING ACT, 1906

Crown lands

Gold and minerals other than coal and shale Mining lessees paid 5s per acre to 18th December, 1918, and then 1s per acre to 28th November, 1921, and 2s per acre thereafter

Private lands

Gold and minerals other than coal and shale Mining leases pay £1 per acre or part thereof for the surface required only, unless otherwise agreed upon between the owner and the applicant

MINING ACT 1906 AS AMENDED BY THE AMENDMENT ACT, 1918

Private lands

Minerals (other than coal and shale) not reserved to the Crown
The rental is £1 per acre per annum or part thereof for the surface required only, unless otherwise agreed upon between the owner and the applicant

MINING ACT, 1906 AS AMENDED BY THE AMENDMENT ACT, 1924

Private lands

Minerals (other than coal and shale) not reserved to the Crown
Mining leases pay a rental of £1 per acre or part thereof per annum for the surface required only, unless otherwise agreed upon between the applicant and the owner

MINING ACT, 1906 (DREDGING LEASES)

Gold or minerals The rental for dredging leases of Crown lands under the above Act and amending Acts to the end of 1935 is 2s 6d per acre per annum For leases of private land the rate is assessed by the Warden

MINING ACT, 1899 (DREDGING LEASES)

Gold or minerals The rental for dredging leases of Crown lands is £1 per acre per annum up to 17th December 1902 and thereafter 2s 6d per acre per annum For leases of private land, as assessed by the Warden

Mining Act, 1906 (SPECIAL LEASIS)

Gold or minerals other than coal and shale The rental is fixed by the Governor of the State

Mining Act, 1906 AGREEMENTS UNDER SECTION 69 (CROWN MINERALS) AND SECTION 70 (PRIVATE MINERALS)

The rent is fixed by agreement between the owner of the land and the lessee

Period and Renewal of Mining Leases

Mining Act, 1906, AND SUBSEQUENT AMENDMENTS TO END OF 1935

All leases granted under the Mining Act, 1906, may be for a term not exceeding 20 years and may be renewed for two further periods not exceeding 20 years each, subject to such rents, royalties and other covenants and conditions as the Governor may approve. The maximum term under the law as it stands at present is 60 years.

LEASES OF CROWN LANDS GRANTED UNDER ACTS REPEALED BY THE MINING ACT, 1906

Leases of Crown lands granted under any Act repealed by the Mining Act, 1906, may be renewed for three further terms not exceeding 20 years each, thus making the maximum term for this class of lease 80 years, subject to such rents, royalties and other covenants and conditions as the Governor may approve.

VICTORIA*

All gold and silver occurring on or below the surface of land in Victoria is the property of the Crown as also are all other minerals except on land alienated before 2nd March, 1892.

Amount of Royalty

The only royalties levied under leases or licences issued under the Mines Act, 1928, are in respect of the following

Coal A royalty of $\frac{1}{4}$ d per ton of coal or slack coal obtained from a seam of 2 ft or under, with an increase of one sixteenth of 1d per ton for each additional inch or portion of an inch up to 3 ft, and on the maximum of the before mentioned rate (i.e., 1d) an increase of

* Thanks are due to T. Maughan Esq., for obtaining from the Secretary, Department of Mines Victoria, the information from which this statement was compiled.

Amount of Royalties and their Assessment

Coal During the first 5 years of the lease, 4d per ton of coal raised from land situated more than 100 miles from a seaport or other place of delivery, and 6d per ton of coal raised from land situated not more than 100 miles from a seaport or other place of delivery, and during the remainder of the term in the first mentioned case at the rate of 8d, and in the second case at the rate of 1s per ton of coal raised

In cases where coal deposits are the property of the freeholder—that is, in freeholds alienated from the Crown prior to the passing of the Mining on Private Land Act, 1909—the fixing of any royalty with a private lessee for the mining of the coal is entirely with the owner

Petroleum The following royalties are payable under the Petroleum Acts, 1923 to 1929

(i) $12\frac{1}{2}$ per cent of the gross value of petroleum produced from deposits at a depth of 2,000 ft or less,

(ii) 10 per cent of the gross value of petroleum produced from deposits at a depth of 2,000 ft and less than 4,000 ft,

(iii) $7\frac{1}{2}$ per cent of the gross value of petroleum produced from deposits at a depth of 4,000 ft and over

In the case of petroleum produced by absorption or other process from natural gas, the royalty payable under (i), (ii), and (iii) above shall respectively be 10 per cent, $7\frac{1}{2}$ per cent, and 5 per cent of such gross value of petroleum so produced

Gold If occurring associated with other minerals in land held under a mineral lease for minerals other than gold, 1 per cent of the value of the gold. No royalty is payable on gold recovered from a gold mining lease

Rents under Mining Leases

Coal or mineral oil lease 1s per acre per annum

Petroleum lease 6d per acre per annum

Gold mining lease £1 per acre per annum

Mineral lease 10s per acre per annum

Period and Renewal of Mining Leases

Coal, gold and mineral leases These leases may be issued for a term not exceeding 21 years, but are renewable for further periods of 21 years each on the same terms as may be in force with regard to gold mining leases at the time of such renewal

Petroleum leases Issued for a period of 21 years, with a preferent right in the lessee to renew for further periods of 21 years, subject,

however in the case of each renewal to the laws in force at the date of such renewal relating to the amount and payment of royalties on petroleum and the amount and payment of rent with respect to the land demised

WESTERN AUSTRALIA*

Gold silver and other precious metals on or below the surface of all land in Western Australia whether alienated or not alienated from the Crown and if alienated whensoever alienated are the property of the Crown All other minerals on or below the surface of any land in Western Australia which was not alienated in fee simple from the Crown before 1st January 1899, are the property of the Crown

Amount of Royalties and their Assessment

Coal 3d per ton raised during the first 10 years of the lease and thereafter 6d per ton

Mineral oil 5 per cent of the output for the first 5 years and thereafter 10 per cent

Gold No royalty is charged on gold obtained from an ordinary gold mining lease The royalty on gold occurring associated with any other mineral in land held under a mineral lease or when it covered by sluicing or dredging is 1s per fine oz

Rents under Mining Leases

Coal and mineral oil leases 6d per acre per annum, except in the case of Reward leases, on which a peppercorn rent is charged for the first 5 years

Mineral leases Usually 5s per acre per annum but in certain cases a rent of not less than 2s per acre may be levied

Gold mining leases 5s per acre per annum for first 12 months and thereafter £1 per acre per annum

Period and Renewal of Mining Leases

Gold mining and mineral leases are issued for a term of 21 years, and the lessee has the right at the expiration of his lease to a renewal for a further period of 21 years subject to the provisions of the Acts and Regulations relating to such leases in force at the time of such renewal

* Thanks are due to T Maughan Esq for obtaining from the Under Secretary for Mines the information from which this statement was compiled

TASMANIA*

The Mining Act, 1929, provides for the leasing for minerals of all private land, royalties being paid by the lessees on minerals which belong to the owners of the land

The ownership of minerals is divided between the Crown and private lands as follows

Gold and silver Except in a few cases the Crown has always retained the ownership of the gold and silver when land is granted or sold

Other minerals In all land granted or sold by the Crown prior to 1893, and land to a depth of 50 ft alienated between 1893 and 1912, only the gold and silver were reserved to the Crown, all other minerals thereby becoming the property of the land owners

From 1893 to 1912 the Crown reserved to itself all minerals below a depth of 50 ft In land alienated since 1912 the Crown has reserved to itself all minerals at and below the surface

Amount of Royalties and their Assessment

Crown lands

Oil 5 per cent of the gross value of oil won from leases after the first 50,000 galls

Private lands

The Mining Act, 1929, provides that where a lease was granted by the Crown prior to 14th November, 1893, entitling the holder to any mining product (other than gold and silver) won from such land, the owner is entitled to be paid a royalty as may be agreed between the lessee and the owner, or in case of dispute by the Warden of Mines

The rate of royalty payable shall not be less than 3d per ton of coal or shale, or for every gallon of oil, and 2 per cent of the value of any other mining product, and not exceeding twice these amounts respectively, as the Warden may determine

Rates of royalty as above may, at the end of a period of 7 years and at the end of any subsequent period of a like term, be revised by the Warden of Mines upon the application of either the lessee or the owner, but in no case may the rates be more or less than the maximum and minimum rates specified above

Where a lease is granted on private land the holder of which has the right under the original grant to all minerals, inclusive of gold and silver, the owner shall be entitled, subject as aforesaid, to be paid a royalty in respect of gold and silver at the rate to which he is entitled in respect to other minerals

* Thanks are due to T. Maughan, Esq., for obtaining from the Secretary for Mines, Tasmania, the information from which this statement was compiled

All such royalties have to be paid by the lessee to the Secretary for Mines, who will deduct one twentieth and pay the balance to the owner of the land

Rents under Mining Leases

Coal 2s 6d per acre per annum

Oil 1s per acre per annum

Mineral 5s per acre per annum

Stone 2s 6d per acre per annum

Period and Renewal of Mining Leases

Coal oil mineral and stone leases are issued for a term of 21 years, and the holder is entitled subject to the provisions of the Mining Act 1929 and to the compliance with prescribed conditions, to a renewal of such lease. The rent and royalty payable in respect of a renewal shall be at a rate not exceeding five times the rate of the rent or twice the rate of the royalty reserved in the original lease. Special leases are granted in certain cases where conditions are such that a concession to the lessee in the matter of reduction of rents is desirable. Such special leases are only granted subject to the approval of both Houses of Parliament.

NORTHERN TERRITORY*

With the exception of an area of about 500,000 acres granted in fee simple by the South Australian Government in the years 1869-1870 in respect of which no reservation to the Crown of all metals, minerals, mineral oil etc., included in such lands was made, the ownership of all metals minerals and mineral oils etc., included in the balance of the lands comprising the Northern Territory is vested in the Crown.

Mining on Crown lands in the Northern Territory is governed by the Northern Territory Mining Act, 1903 and the term "Crown lands" is defined by the Act as follows

Crown lands means all lands vested in His Majesty in the Northern Territory except (1) lands reserved for or dedicated to any public purpose, (2) lands lawfully granted or contracted to be granted in fee simple by or on behalf of the Crown, (3) lands subject to any lease with right of purchase, (4) lands leased under the Gold Dredging Act, 1899, (5) lands held under or the subject of a special permit under Sections 2 and 3 of the Northern Territory Crown Lands Amendment Act, 1896, (6) lands held under any gold mining lease or mineral lease,

* Thanks are due to T. Vaughan Esq., for obtaining from the Secretary, Property and Survey Branch, Department of the Interior, the information from which this statement was compiled.

and (7) lands exempted under Section 31 of this Act from being taken up and occupied or from further occupation or temporarily reserved by the Minister or a Warden under Section 139A of this Act

Amount of Royalties and their Assessment

Gold and mineral leases These pay half yearly an amount equal to 6d. in the £ sterling on the net profits obtained from the occupation and working of mines, and the sale of metals and minerals obtained therefrom. When gold is found associated or combined with any other mineral in land held under mineral lease, and the nature of the mining operations is such as to lead to the extraction of such gold, the lessee pays an additional royalty of 1 per cent. of the value of the gold extracted.

Mineral oil leases These pay 5 per cent. on the gross value of the crude oil obtained, but the lease granted to the first discoverer of mineral oil in payable quantities will only pay 2½ per cent. royalty during the first 5 years of the lease.

Rents under Mining Leases

The rent payable in respect of mining leases for minerals, coal or mineral oil is 1s. per acre per annum.

Period and Renewal of Mining Leases

Gold leases may be granted for a term of 42 years, and such leases may be renewed for a further period subject to the provisions of the mining legislation in force at the time of renewal.

Mineral leases are issued for a term not exceeding 99 years.

Coal and mineral oil leases which are issued for a term not exceeding 21 years may be renewed for a further term not exceeding 21 years at the discretion of the Minister.

NEW GUINEA*†

All gold, silver, copper, tin, antimony, and metals of every description, opals, gems, precious stones, and coal, shale and mineral oils, on, in or under all lands (a) alienated in fee simple at any time prior to the commencement of the Mining Ordinance 1928-1933, or (b) at

* Thanks are due to T. Maughan Esq., for obtaining from the Prime Minister's Department of the Commonwealth the information from which this statement was compiled.

† Man listed to the Commonwealth of Australia.

any time prior to the commencement of this Ordinance vested in the Administrator or dedicated to any public purpose or (c) held under lease, licence or permit from the Administrator granted under any Ordinance relating to lands in the Territory or (d) being Administration lands or (e) being native lands are deemed always to have been the property of the Administration and shall be deemed not to have been parted with under any such alienation dedication or lease or licence or permit of such lands. The term native lands includes all lands which have never been vested in the Administrator.

Amount of Royalties and their Assessment

According to the Mining Ordinance, 1928 1933, and the Mineral Oil and Coal Ordinance 1928 1933, royalties are payable as follows

Mineral oil 5 per cent of the gross value of all crude oil obtained from the land included in a mineral oil lease. In the case of leases granted to the first discoverer of mineral oil, the royalty is 2½ per cent for the first five years of the lease and thereafter 5 per cent.

Gold (including platinum, osmium, iridium and any metal belonging to the platinum group of metals) 5 per cent of the value.

Export Duties

Sulphur 1s per ton on sulphur or any substance exported for the purpose of extracting sulphur therefrom.

Rents under Mining Leases

Coal leases 2s 6d per hectare per annum

Mineral oil leases 2s 6d per hectare per annum

Gold mining leases £2 10s per hectare per annum

Mineral leases £1 5s per hectare per annum

Dredging claims 6s 3d per hectare for the first year and 12s 6d per hectare per annum thereafter

Period and Renewal of Mining Leases

Gold, mineral, mineral oil and coal leases may be issued for a term not exceeding 21 years and are renewable for a further term of 21 years on the same terms as are in force with regard to mineral leases at the time of renewal provided that the Administrator is satisfied that the lessee has faithfully observed the conditions of the lease.

PAPUA*

The Mining Ordinance, 1907, provides that all minerals, gems and precious stones on or under native lands shall, after the passing of this Ordinance, be the property of His Majesty

Section 10 of the Land Ordinance, 1911-1927, provides that no estate in fee simple or other estate in freehold shall be granted of any land the property of His Majesty, but leases may be granted by the Lieutenant Governor, and every lease the term whereof commences after 1st June, 1910, shall, except as may be expressly stated therein, be deemed to contain a reservation of all mines, minerals, coal, shale and mineral oils and of the right of access for the purpose of searching and working for them, and may also contain any conditions or reservation which the Lieutenant Governor may consider necessary in the public interest

According to Section 10 of the Petroleum (Mining) Ordinance, 1934, notwithstanding anything contained in any law of the Territory or in any grant, instrument of title or other document, all petroleum and helium on or below the surface of all land in the Territory shall be and shall at all times be deemed to have been, the property of His Majesty

Amount of Royalties and their Assessment

Gold 1s per oz For the purpose of assessing royalty, an ounce is held to be so much as is valued at any of His Majesty's Royal Mints at the sum of £3 17s 10½d When found associated or combined with any other mineral in land held under mineral lease and the nature of the mining operations is such as to lead to the extraction of such gold, a royalty of 1 per cent of the value of the gold extracted is payable In practice, the value is computed from the assay of the ore, etc., exported

Petroleum (a) 12½ per cent of the gross value of petroleum produced from deposits at a depth of 2,000 ft or less, (b) 10 per cent of the gross value of petroleum produced from deposits at a depth of more than 2,000 ft and less than 4,000 ft; and (c) 7½ per cent of the gross value of petroleum produced from deposits at a depth of 4,000 ft and over

Provided that in the case of petroleum produced by absorption or other process from natural gas, the royalty payable under (a), (b) and (c) above shall be 10, 7½ and 5 per cent respectively of the gross value of petroleum so produced

When, however, the daily production of petroleum from all producing wells upon any lease does not exceed an average of 2 barrels for each producing well, no royalty is payable

* Thanks are due to T Maughan Esq., for obtaining from the Prime Minister's Department of the Commonwealth the information from which this statement was compiled

When the daily production exceeds an average of 2 barrels, but does not exceed an average of 10 barrels for each producing well, one third of the royalty calculated in the manner prescribed under (a), (b), or (c) above is payable by the lessee

When the daily production exceeds an average of 10 barrels, but does not exceed an average of 20 barrels for each producing well, two-thirds of the royalty calculated in the manner prescribed under (a), (b), or (c) above is payable by the lessee

When the daily production exceeds an average of 20 barrels for each producing well the full royalty calculated in the manner prescribed under (a) (b) or (c) above is payable by the lessee

Rents under Mining Leases

Gold mining lease £1 per acre per annum

Mining lease 10s per acre per annum

Petroleum 1s 8d per acre per annum, payable in addition to royalty

Dredging claims £6 per annum per mile of ground in a river bed and 2s 6d per acre for ground not comprised in a river bed

Period and Renewal of Mining Leases

Gold mining leases These are issued for a first term of 21 years, and may be renewed for a further period of 21 years on the same terms as may be in force with regard to gold mining leases at the time of such renewal

Mineral leases These are issued for a first term of 21 years, and may be renewed for a further period of 21 years on such conditions as the Lieutenant Governor deems equitable

Petroleum leases These are issued for a first term of 21 years, and may be renewed, subject to conditions, for successive terms of 21 years

Fiji*

All minerals, including crude oil in or under all lands of whatsoever tenure in the Colony are deemed always to have been the property of the Crown save in so far as the Crown's ownership may in any case have been limited by any express grant made before the commencement of the Mining Ordinance 1934

* Thanks are due to the Chairman Mining Board Fiji for kindly furnishing the information from which this statement was compiled

Amount of Royalties and their Assessment

Gold 5 per cent of the value in Fiji currency

Silver 1 per cent of the value in Fiji currency

On all other precious metals precious stones or other minerals, such royalties as may be prescribed by Regulations

Export Duties

No export duties are payable on minerals or metals A Port and Customs Service tax of 1 per cent of the value is leviable, assessed on the value in the overseas market less the cost of transport and charges to the port of destination

Rents under Mining Leases

Coal mining 1s per acre per annum

Alluvial mining 5s per acre per annum

Mineral mining (earthy and metalliferous minerals) 3s per acre per annum

Precious metals 5s per acre per annum

Precious stones 5s per acre per annum

Period and Renewal of Mining Leases

Mining leases may be issued for not less than 5 or more than 21 years At the expiration of the term a renewal may be granted for a further term of 21 years upon the conditions then in force in regard to new leases, but without the option of further renewal

NEW ZEALAND

The Crown has an absolute right to gold and silver, although it has never laid claim to its privileges in regard to these metals further than by levying special taxation by way of a gold duty

The ownership of other metals and minerals (including coal and mineral oil) is mainly in the Crown, although in a large number of cases in the past, where private persons have acquired the *fee simple* of land, the minerals have passed with the title

Amount of Royalties and their Assessment

Coal Under a coal mining lease royalty is payable at the rate of not less than 2d and not more than 1s per ton of marketable coal raised

Where the royalty calculated in accordance with the terms of a lease for any half yearly period exceeds the rent for that period the royalty payable for that period is reduced to the amount by which the royalty so calculated exceeds the rent. If the royalty does not exceed the rent but exceeds 10 per cent of the rent the royalty payable is reduced to an amount equal to 70 per cent of the rent.

Mineral oil and gas In the case of leases for boring for petroleum and other mineral oils and for natural gas granted by the Crown the royalty fixed is usually 10 per cent of the value at the bore's mouth of crude petroleum oil obtained and 5 per cent of the value of all gas obtained and sold or otherwise disposed of.

In the case of private lands where the mineral rights are also held by the owner of the land the rate of royalty fixed is usually 5 per cent of the value of the oil or gas at the bore's mouth as in the case of Crown leases.

Minerals other than gold The royalty payable under a Mineral Licence (maximum area 320 acres) authorizing the holder to occupy any Crown land for the purpose of mining for any specified metal or mineral other than gold is not less than 1 nor more than 4 per cent of the value of such specified metal or mineral at the pit's mouth.

In the case of a Mineral Lease (maximum area 1000 acres) authorizing the holder to mine for any specified mineral or minerals other than gold the royalty payable is 5 per cent of the value of the mineral or minerals at the pit's mouth.

Gold No royalty is payable on any gold obtained from a claim.

Export Duties

No export duties are levied on coal, ores, minerals and metals etc except gold upon which the present rates are as follows:

Gold produced in the North Island by alluvial or dredge mining 14s 6d per oz troy *

Gold produced in the North Island otherwise than by alluvial or dredge mining 15s per oz troy

Gold produced in the South Island by alluvial or dredge mining and exported therefrom 12s 6d per oz troy

Gold produced in the South Island otherwise than by alluvial or dredge mining and exported therefrom 13s per oz troy

Gold not produced in New Zealand and exported from the North Island 14s 6d per oz troy

Gold not produced in New Zealand and exported from the South Island 14s 6d per oz troy

So far as the gold mining industry is concerned it is necessary to explain that in the North Island property used for gold mining

* Of a fineness of 20 carats or over

purposes is not subject to local rating, but in lieu of obtaining rates from such properties the local governing bodies derive the revenue received from the gold export duty of 2s per oz troy of gold exported of a fineness of 20 carats and upwards and a proportionate amount for gold of a lower fineness

Rents under Mining Leases

Coal mining lease Not less than 1s or more than 5s per acre

Mineral licence (maximum area 320 acres) 2s 6d per acre per annum All sums paid in respect of royalty during any period are, to the extent of the rent payable for the same period, deemed to be in or towards satisfaction of such rent

Gold mining licence (maximum area of alluvial claim 300 acres, quartz claims 100 acres, dredging claims 1,200 acres) 2s 6d per acre per annum for first year, 5s for second year, 7s 6d for every subsequent year

Mineral lease (maximum area 1,000 acres) 2s 6d per acre per annum When the amount of royalty payable on a mineral lease exceeds the amount of the rent in any one year, the rent for that year ceases

Mineral oil and gas (1) 2s 6d per acre per annum in respect of all land comprised in any mineral lease to mine for mineral oil and gas over Crown lands, (2) usually £5 per annum for every acre actually used in the course of mining operations under a lease to mine for mineral oil and gas granted by the Crown for and on behalf of any local authority, public body or trustee, over land held in trust for special purposes

Period and Renewal of Mining Leases

No special provisions are made in regard to mineral leases, but (1) coal mining leases may be renewed periodically up to a total of 66 years, (2) mineral licences and gold mining claim licences may be renewed for any term not exceeding the maximum prescribed in the case of the original term

OTHER EMPIRE COUNTRIES

No general mining legislation is in force in Antigua Bahamas, Barbados Bermuda, Gambia Malta, Mauritius St Christopher Nevis Seychelles St Vincent, Tonga, Turks and Caicos Islands, and Virgin Islands

PART II

ROYALTIES CLASSIFIED UNDER MINERAL GROUPS*

In this section the data available have been tabulated under the following groups (1) Coal and lignite (2) petroleum, (3) natural gas, (4) bituminous and oil shales (5) ores of iron and of the ferro alloy metals, (6) base metals (7) precious metals, (8) precious stones, (9) miscellaneous minerals. For convenience groups (5), (6) and (9) have been taken to comprise the following metals and minerals

(5) *Ores of iron and of the ferro-alloy metals* Iron, manganese, chromium, cobalt molybdenum, nickel, tantalum, tungsten, uranium, and vanadium

(6) *Base metals* Aluminium, antimony, bismuth, cadmium, copper, lead mercury, tin and zinc

(9) *Miscellaneous minerals* Those not already included under the categories of coal petroleum, natural gas, bituminous and oil shales, ores of iron and of the ferro alloy metals, base metals, precious metals and precious stones

The category includes asbestos, arsenic, barytes, beryl, cadmium, diatomite, fireclay, fluorspar, graphite, gypsum, ilmenite, kyanite, limestone lithium, magnesite, ochres, phosphates, potash, salt, selenium, strontium, sulphur, talc, thorium and zirconium

COAL

EUROPE

UNITED KINGDOM 5½d per ton (average) †

IRISH FREE STATE 3d per ton

AFRICA

BECHUANALAND 3d per ton (2,000 lb) Tati District, 6d per ton

NIGERIA *Lignite* 1½d per ton mined

NORTHERN RHODESIA 1s per ton (2,000 lb) raised in each year over 20 tons per 100 acres (from locations registered under prospecting licences)

* Including export duties where these exist

† Rates fixed by private negotiation

- SOMALILAND PROTECTORATE 2 per cent of the product or of its equivalent value at the mine at the discretion of the Controller of Mines
- SOUTHERN RHODFSIA 6d per ton (2 000 lb)
- TANGANYIKA 30 cents per ton
- UGANDA 30 cents per ton
- UNION OF SOUTH AFRICA A profits tax of 2s 6d in the £ less deductions

AMERICA

CANADA

NOVA SCOTIA 12½ cents per ton or a rate of 3 per cent upwards on profits exceeding \$10 000 per annum

NEW BRUNSWICK The rate now charged is 10 cents per ton but up to 15 cents per ton may be levied

ONTARIO AND MANITOBA 3 per cent upwards of profits exceeding \$10 000 per annum less allowances

SASKATCHEWAN *Lignite* 5 cents per ton (2 000 lb)

ALBERTA 5 cents per ton (2 000 lb)

BRITISH COLUMBIA (excluding part of Vancouver Island) 10 cents per ton (2 000 lb)

NORTHWEST TERRITORIES AND YUKON 5 cents per ton (2 000 lb) of merchantable coal produced

NEWFOUNDLAND (LABRADOR ONLY) 12½ cents per ton

LEEWARD ISLANDS (DOMINICA AND MONTserrat) 5s per ton

ASIA

CEYLON *Crown lands* Not less than 5 per cent *ad val* may be levied

Private lands Fixed by negotiation and vary from one fourth to one tenth of mineral won

PALESTINE AND TRANS JORDAN 2 per cent of the product or of the equivalent money value thereof at the mine

INDIA (BRITISH) *Coal* 5 per cent *ad val* with a minimum of 2 annas per ton (except in Baluchistan where the rate is 6 annas per ton)

Coal dust One half of the rate for coal

INDIA (NATIVE STATES)

AIWAR BHARATPUR HYDERABAD DECCAN JAIPUR 5 per cent of the sale value at the pit's mouth with minimum of 2 annas per ton (Bharatpur export duty 4 annas per maund)

JAMMU AND KASHMIR 5 per cent of the gross value, minimum 4 annas per ton

KORFA 5 per cent of the sale value or 2 annas per ton, whichever shall be the greater

MYSORE 5 per cent of the value at the pit a month

PUDUKKOTTAI 1 anna per ton

REWA 4 to 6 annas per ton

TALCHER 2 annas per ton

TRAVANCORE 1 anna per ton

FEDERATED MALAYA STATES 25 cents per ton

AUSIRALASIA

AUSTRALIA

NEW SOUTH WALES 6d per ton

VICTORIA $\frac{1}{2}$ d per ton of coal or slack coal obtained from a seam of 2 ft or under with an increase of $\frac{1}{8}$ d per ton for each additional inch or portion of an inch up to 3 ft, and on the maximum of the before mentioned rate (i.e., 1d) an increase of $\frac{1}{2}$ d per ton for each inch or portion of an inch when the same is over 3 ft provided the royalty shall not exceed 6d per ton

QUEENSLAND 4d to 6d per ton raised during the first 5 years and 8d to 1s during the remainder of the lease

SOUTH AUSTRALIA 6d in £ on profits

WESTERN AUSTRALIA 3d per ton raised during the first 10 years of the lease and 6d per ton thereafter

TASMANIA 3d to 6d per ton

NEW ZEALAND 2d to 1s per ton of marketable coal raised

KOREA 5 per cent of the sale value of 2000 per ton
whichever shall be the greater

MYANMAR 5 per cent of the sale value of 1000 with

PURUKHUTAL 1 anna per ton

BEWA 4 to 6 annas per ton

TALCHER 2 annas per ton

TRAVANCORE 1 anna per ton

FEDERATED MALAY STATES 25 cents per ton

AUSTRALASIA

AUSTRALIA

NEW SOUTH WALES 6d per ton

VICTORIA ½d per ton of coal or slack coal obtained from a seam of 2 ft or under, with an increase of ¼d per ton for each additional inch or portion of an inch up to 3 ft, and on the maximum of the before mentioned rate (i.e. 1d) an increase of ½d per ton for each inch or portion of an inch when the same is over 3 ft, provided the royalty shall not exceed 6d per ton

QUEENSLAND 4d to 6d per ton raised during the first 5 years and 8d to 1s during the remainder of the lease

SOUTH AUSTRALIA 6d in £ on profits

WESTERN AUSTRALIA 3d per ton raised during the first 10 years of the lease and 6d per ton thereafter

TASMANIA 3d to 6d per ton

NEW ZEALAND 2d to 1s per ton of marketable coal raised

SOMALILAND PROTECTORATE 2 per cent of the product or of its equivalent value at the mine, at the discretion of the Controller of Mines

SOUTHERN RHODESIA 6d per ton (2,000 lb)

TANGANYIKA 30 cents per ton

UGANDA 30 cents per ton

UNION OF SOUTH AFRICA A profits tax of 2s 6d in the £, less deductions

AMERICA

CANADA

NOVA SCOTIA $12\frac{1}{2}$ cents per ton or a rate of 3 per cent upwards on profits exceeding \$10,000 per annum

NEW BRUNSWICK The rate now charged is 10 cents per ton, but up to 15 cents per ton may be levied

ONTARIO AND MANITOBA 3 per cent upwards of profits exceeding \$10 000 per annum, less allowances

SASKATCHEWAN *Lignite* 5 cents per ton (2,000 lb)

ALBERTA 5 cents per ton (2,000 lb)

BRITISH COLUMBIA (excluding part of Vancouver Island) 10 cents per ton (2,000 lb)

NORTHWEST TERRITORIES AND YUKON 5 cents per ton (2,000 lb) of merchantable coal produced

NEWFOUNDLAND (LABRADOR ONLY) $12\frac{1}{2}$ cents per ton

LEEWARD ISLANDS (DOMINICA AND MONTSERRAT) 5s per ton

ASIA

CEYLON *Crown lands* Not less than 5 per cent *ad val* may be levied

Private lands Fixed by negotiation and vary from one-fourth to one tenth of mineral won

PALESTINE AND TRANS JORDAN 2 per cent of the product or of the equivalent money value thereof at the mine

INDIA (BRITISH) *Coal* 5 per cent *ad val*, with a minimum of 2 annas per ton (except in Baluchistan, where the rate is 6 annas per ton)

Coal dust One half of the rate for coal

INDIA (NATIVE STATES)

ALWAR, BHARATPUR, HADFRABAD DECCAN, JAIPUR 5 per cent of the sale value at the pit's mouth, with minimum of 2 annas per ton (Bharatpur, export duty 4 annas per maund)

JAMMU AND KASHMIR 5 per cent of the gross value, minimum 4 annas per ton

[Faint, illegible handwritten notes]

FEELING

Answer

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SECRET

22. The first two terms of the series are 1 and 1/2. The third term is 1/4. The fourth term is 1/8. The fifth term is 1/16. The sixth term is 1/32. The seventh term is 1/64. The eighth term is 1/128. The ninth term is 1/256. The tenth term is 1/512. The eleventh term is 1/1024. The twelfth term is 1/2048. The thirteenth term is 1/4096. The fourteenth term is 1/8192. The fifteenth term is 1/16384. The sixteenth term is 1/32768. The seventeenth term is 1/65536. The eighteenth term is 1/131072. The nineteenth term is 1/262144. The twentieth term is 1/524288. The twenty-first term is 1/1048576. The twenty-second term is 1/2097152. The twenty-third term is 1/4194304. The twenty-fourth term is 1/8388608. The twenty-fifth term is 1/16777216. The twenty-sixth term is 1/33554432. The twenty-seventh term is 1/67108864. The twenty-eighth term is 1/134217728. The twenty-ninth term is 1/268435456. The thirtieth term is 1/536870912. The thirty-first term is 1/1073741824. The thirty-second term is 1/2147483648. The thirty-third term is 1/4294967296. The thirty-fourth term is 1/8589934592. The thirty-fifth term is 1/17179869184. The thirty-sixth term is 1/34359738368. The thirty-seventh term is 1/68719476736. The thirty-eighth term is 1/137438953472. The thirty-ninth term is 1/274877906944. The fortieth term is 1/549755813888. The forty-first term is 1/1099511627776. The forty-second term is 1/2199023255552. The forty-third term is 1/4398046511104. The forty-fourth term is 1/8796093022208. The forty-fifth term is 1/17592186044416. The forty-sixth term is 1/35184372088832. The forty-seventh term is 1/70368744177664. The forty-eighth term is 1/140737488355328. The forty-ninth term is 1/281474976710656. The fiftieth term is 1/562949953421312. The fifty-first term is 1/1125899906842624. The fifty-second term is 1/2251799813685248. The fifty-third term is 1/4503599627370496. The fifty-fourth term is 1/9007199254740992. 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The hundred-ninth term is 1/324518553658426726783156020576256. The hundredth term is 1/649037107316853453566312041152512. The hundred-first term is 1/1298074214633706907132624082305024. The hundred-second term is 1/2596148429267413814265248164610048. The hundred-third term is 1/5192296858534827628530496329220096. The hundred-fourth term is 1/10384593717069655257060992658440192. The hundred-fifth term is 1/20769187434139310514121985316880384. The hundred-sixth term is 1/41538374868278621028243970633760768. The hundred-seventh term is 1/83076749736557242056487941267521536. The hundred-eighth term is 1/166153499473114484112975882535043072. The hundred-ninth term is 1/332306998946228968225951765070086144. The hundredth term is 1/664613997892457936451903530140172288. The hundred-first term is 1/1329227995784915872903807060280344576. The hundred-second term is 1/2658455991569831745807614120560689152. The hundred-third term is 1/5316911983139663491615228241121378304. The hundred-fourth term is 1/10633823966279326983230456482242756608. The hundred-fifth term is 1/21267647932558653966460912964485513216. The hundred-sixth term is 1/42535295865117307932921825928971026432. The hundred-seventh term is 1/85070591730234615865843651857942052864. The hundred-eighth term is 1/170141183460469231731687303715884105728. The hundred-ninth term is 1/340282366920938463463374607431768211456. The hundredth term is 1/680564733841876926926749214863536422912. The hundred-first term is 1/1361129467683753853853498429727072845824. The hundred-second term is 1/2722258935367507707706996859454145691648. The hundred-third term is 1/5444517870735015415413993718908291383296. The hundred-fourth term is 1/10889035741470030830827987437816582766592. The hundred-fifth term is 1/21778071482940061661655974875633165533184. The hundred-sixth term is 1/4355614296588

THE UNIVERSITY OF CHICAGO

(5) $\frac{1}{2} \pi$ and $\frac{3}{2} \pi$

IS IT THE SAME AS THE ONE IN THE PICTURE?

Q-INTERVIEW

U. S. DEPT. OF AGRICULTURE

St. Louis

10-11-12

10 YEARS OF

TABLE 2

NEW ZEALAND

MINERAL OIL (PETROLEUM)

EUROPE

UNITED KINGDOM The royalty may be between a minimum of 3s and a maximum of 6s per ton of oil obtained

AMERICA

CANADA

NEW BRUNSWICK 5 per cent of the output or its equivalent value at the well's mouth, at the option of the Lieutenant Governor in Council

QUEBEC ONTARIO MANITOBA 3 per cent upwards on profits exceeding \$10 000 per annum, less deductions

ALBERTA AND SASKATCHEWAN $2\frac{1}{2}$ to 5 per cent of sales value during the first 5 years of production, increasing later to a maximum of 10 per cent

BRITISH COLUMBIA $2\frac{1}{2}$ cents per barrel (35 Imperial galls)

NORTH WEST TERRITORIES 10 per cent of the value

YUKON $2\frac{1}{2}$ to 5 per cent of the sales value or 5 per cent of the output during the first 5 years of production, increasing later to a maximum of 10 per cent

BRITISH GUIANA 72 cents per ton plus $1\frac{1}{2}$ per cent *ad val* export duty

BRITISH HONDURAS 50 cents per ton with a reduction to 38 cents per ton when the output exceeds 100,000 tons per annum

LEEWARD ISLANDS 5s per 40 galls or 5 per cent *ad val*

TRINIDAD *Petroleum* 4d per barrel (35 Imperial galls) until the end of 1936, thereafter 4d to 9d per barrel according to the "ascertained value"

Casing head spirit $\frac{1}{4}$ d to 4d per gall according to the amount recovered per 1,000 cu ft of gas treated and the average Gulf export price of gasoline

ASIA

PALESTINE AND TRANS JORDAN 5 per cent on an annual output of 10,000 tons increasing by $2\frac{1}{4}$ per cent for each 40,000 tons up to 130 000 tons, above which the duty is 15 per cent

INDIA (BRITISH) 5 per cent *ad val*, with a minimum of 8 annas per 40 galls

INDIA (NATIVE STATES)

ALWAR, BHARATPUR, COCHIN JAIPUR JAMSHI AND KASHMIR, PUDUCHKOTTAI, TRAVANCORE 8 annas per 40 galls or 5 per cent of the gross value

HYDERABAD DICCAN 8 annas per 40 galls

AUSTRALASIA

AUSTRALIA

QUEENSLAND $7\frac{1}{2}$ to $12\frac{1}{2}$ per cent of the gross value according to the depth from which the oil is obtained On petroleum obtained from natural gas 5 to 10 per cent of the gross value

WESTERN AUSTRALIA 5 per cent of the output for the first 5 years and 10 per cent thereafter

TASMANIA 3d to 6d per gall if on private land If won from an oil lease on Crown land, 5 per cent *ad val* after the first 50,000 galls

NORTHERN TERRITORY 5 per cent *ad val* on crude oil but only $2\frac{1}{2}$ per cent for the first 5 years for the first discovery of oil in payable quantity.

NEW GUINEA 5 per cent of the gross value on crude oil obtained from a mineral oil lease, but only $2\frac{1}{2}$ per cent is payable for the first 5 years for the first discovery of oil in payable amounts

PAPUA 5 to $12\frac{1}{2}$ per cent *ad val*, according to the depth of well from which the oil is obtained No royalty is payable on wells giving 2 barrels or under per well per day

NEW ZEALAND 5 per cent *ad val* at bore hole

NATURAL GAS

AMERICA

CANADA

NEW BRUNSWICK 5 per cent of the output or of its equivalent value at the well's mouth, at the option of the Lieutenant Governor in Council

QUEBEC AND MANITOBA 3 per cent upwards on profits exceeding \$10,000 per annum, less deductions

ONTARIO 2 cents per 1,000 cu ft, less 75 per cent rebate if used in Canada

SASKATCHEWAN, ALBERTA AND YUKON $2\frac{1}{2}$ to 5 per cent of sales value during the first 5 years of production, increasing later to a maximum of 10 per cent

NORTHWEST TERRITORIES If used for the production of carbon black, 5 per cent of the value at the point of production

BRITISH GUIANA 4 cents per 1,000 cu ft sold plus $1\frac{1}{2}$ per cent *ad val* export duty

BRITISH HONDURAS 2 cents per 1,000 cu ft sold

TRINIDAD 2d per 1,000 cu ft sold

ASIA

PALESTINE AND TRANS JORDAN 1 piastre per 1,000 cu ft sold

INDIA (BRITISH) 5 per cent of the well head value if sold or used for purposes other than for the production of natural petroleum or natural gas If converted to gasoline, a minimum of 8 annas per 40 galls of gasoline produced

INDIA (NATIVE STATES)

JAMMU AND KASHMIR 8 annas per 1,000 cu ft

AUSTRALASIA

NEW ZEALAND 5 per cent *ad val* at bore hole

BITUMINOUS AND OIL SHALE

EUROPE

UNITED KINGDOM *Oil shale* 4d to 5d per ton (average) *

AMERICA

CANADA

MANITOBA 3 per cent upwards on profits exceeding \$10,000 per annum, less deductions

NEW BRUNSWICK *Bituminous shale* Not to exceed 15 cents per ton the rate levied is 10 cents per ton

BRITISH GUIANA *Bituminous shale* 10 per cent *ad val*

ASIA

CEYLON *Crown lands* A royalty not less than 5 per cent *ad val* may be levied

Private lands Fixed by negotiation and vary from one fourth to one tenth of the mineral won

INDIA (BRITISH) *Oil shale* 8 annas per 40 galls of crude oil obtained locally or Re 1 per ton of shale mined

INDIA (NATIVE STATES)

COCHIN *Oil shale* 8 annas per 40 galls of crude oil obtained therefrom

AUSTRALASIA

AUSTRALIA

NEW SOUTH WALES *Oil shale* 6d per ton

TASMANIA *Oil shale* 3d to 6d per ton

* Rates fixed by private negotiation

ORES OF IRON AND OF FERRO-ALLOY METALS*

EUROPE

UNITED KINGDOM †	<i>Hæmatite iron ore</i>	7 to 12½ per cent of the value
	<i>Clay ironstone</i>	2d. to 6d per ton
	<i>Jurassic ironstone</i>	2d to 6½d per ton
IRISH FREE STATE	<i>Iron ore</i>	2d per ton

AFRICA

ANGLO EGYPTIAN SUDAN	2 per cent <i>ad val</i> based on the average price on the London market	
NIGERIA	<i>Iron ore or metallic iron</i>	1 per cent <i>ad val</i>
	<i>Wolfram</i>	1 to 5 per cent <i>ad val</i> , according to the price per unit of tungsten realized for the ore
NORTHERN RHODESIA	<i>Vanadium and its ores</i>	5 per cent of the gross value
SIERRA LEONE	<i>Chromite</i>	1s 3d per ton
	<i>Iron ore</i>	5 per cent of the assessable profits
SOMALILAND PROTECTORATE	2 per cent of the product or of its equivalent value	
SOUTHERN RHODESIA	<i>Iron ore.</i>	2 per cent of the gross value
	<i>Manganese</i>	2 per cent of the gross value
	<i>Molybdenum, nickel, cobalt, tantalum, uranium, vanadium, and tungsten</i>	3 per cent of the gross value, but no royalty is payable if the value of the output is less than £200 in any one month
	<i>Chromite</i>	5d per ton (2,000 lb), but no royalty is payable if the output is under 100 tons in any one month
SOUTH-WEST AFRICA	<i>Tungsten or tantalum ore</i>	1 per cent <i>ad val</i>
	<i>Vanadium ore</i>	2 per cent <i>ad val</i>
SWAZILAND	Such amount as will, together with any royalties payable under the concession, bring the total royalties up to 2½ per cent of the value of the ore at the mine	

* For the purpose of this document this group includes ores of iron, chromium, manganese, molybdenum, tungsten, tantalum, vanadium, nickel, cobalt and uranium

† Rates fixed by private negotiation

TANGANYIKA 5 per cent of the gross sum realized

UGANDA 5 per cent of the gross sum realized

UNION OF SOUTH AFRICA 2s 6d in the £ on profits less allowances

AMERICA

CANADA

NOVA SCOTIA *Iron ore* 5 cents per ton sold or smelted

Other ferro alloy minerals 5 per cent *ad val*

NEW BRUNSWICK *Bog manganese* 10 cents per ton

QUEBEC 3 per cent upwards of profits exceeding \$10 000 per annum, less deductions Rates may be trebled in the case of minerals removed outside the province for treatment

ONTARIO, MANITOBA, SASKATCHEWAN, ALBERTA, AND YUKON 3 per cent upwards of profits exceeding \$10 000 per annum, less deductions

BRITISH COLUMBIA *Iron ore* 10 cents per ton of black sand produced under Iron Placer Act

Other ferro alloy minerals 2 per cent *ad val* when the output exceeds \$5,000 per annum in value

NORTHWEST TERRITORIES 3 per cent upwards of profits exceeding \$10 000 per annum, less deductions Minerals obtained by dredging pay 2½ per cent *ad val*

NEWFOUNDLAND 5 per cent of profits, less deductions

BRITISH HONDURAS *Iron or iron ore* 1 per cent *ad val*

Wolfram 2½ per cent when the price per unit of tungsten in London is less than 30s, rising to 7½ per cent *ad val* when the price per unit is 40s or over

LEEWARD ISLANDS (DOMINICA AND MONTserrat) *Ironstone* 20 per cent *ad val*

Molybdenum and other iron alloy minerals 4s 2d per ton of untreated mineral exported

ASIA

NORTH BORNEO 5 per cent *ad val*

CEYLON *Crown lands* A royalty of not less than 5 per cent *ad val* may be levied

Private lands Fixed by negotiation, and vary from one fourth to one tenth of the mineral won

CYPRUS *Manganese* 5 per cent *ad val* on exports

Chromite 1s 4½ copper piastres* per ton exported

Other ferro-alloy minerals 5 per cent *ad val*

ORES OF IRON AND OF FERRO-ALLOY METALS*

EUROPE

UNITED KINGDOM † *Hæmatite iron ore* 7 to 12½ per cent of the value

Clay ironstone 2d to 6d per ton

Jurassic ironstone 2d to 6½d per ton

IRISH FREE STATE *Iron ore* 2d per ton

AFRICA

ANGLO EGYPTIAN SUDAN 2 per cent *ad val* based on the average price on the London market

NIGERIA *Iron ore or metallic iron* 1 per cent *ad val*

Wolfram 1 to 5 per cent *ad val*, according to the price per unit of tungsten realized for the ore

NORTHERN RHODESIA *Vanadium and its ores* 5 per cent of the gross value

SIERRA LEONE *Chromite* 1s 3d per ton

Iron ore 5 per cent of the assessable profits

SOMALILAND PROTECTORATE 2 per cent of the product or of its equivalent value

SOUTHERN RHODESIA *Iron ore* 2 per cent of the gross value

Manganese 2 per cent of the gross value

Molybdenum, nickel, cobalt, tantalum, uranium, vanadium, and tungsten 3 per cent of the gross value, but no royalty is payable if the value of the output is less than £200 in any one month

Chromite 5d per ton (2,000 lb), but no royalty is payable if the output is under 100 tons in any one month

SOUTH WEST AFRICA *Tungsten or tantalum ore* 1 per cent *ad val*

Vanadium ore 2 per cent *ad val*

SWAZILAND Such amount as will, together with any royalties payable under the concession, bring the total royalties up to 2½ per cent of the value of the ore at the mine

* For the purpose of this document this group includes ores of iron, chromium, manganese, molybdenum, tungsten, tantalum, vanadium, nickel, cobalt and uranium

† Rates fixed by private negotiation

- TANGANYIKA 5 per cent of the gross sum realized
 UGANDA 5 per cent of the gross sum realized
 UNION OF SOUTH AFRICA 2s 6d in the £ on profits, less allowances

AMERICA

CANADA

- NOVA SCOTIA *Iron ore* 5 cents per ton sold or smelted
Other ferro alloy minerals 5 per cent *ad val*
 NEW BRUNSWICK *Bog manganese* 10 cents per ton
 QUEBEC 3 per cent upwards of profits exceeding \$10 000 per annum, less deductions Rates may be trebled in the case of minerals removed outside the province for treatment
 ONTARIO, MANITOBA, SASKATCHEWAN, ALBERTA, AND YUKON 3 per cent upwards of profits exceeding \$10 000 per annum, less deductions
 BRITISH COLUMBIA *Iron ore* 10 cents per ton of black sand produced under Iron Placer Act
Other ferro-alloy minerals 2 per cent *ad val* when the output exceeds \$5 000 per annum in value
 NORTHWEST TERRITORIES 3 per cent upwards of profits exceeding \$10 000 per annum, less deductions Minerals obtained by dredging pay 2½ per cent *ad val*
 NEWFOUNDLAND 5 per cent of profits, less deductions
 BRITISH HONDURAS *Iron or iron ore* 1 per cent *ad val*
Wolfram 2½ per cent when the price per unit of tungsten in London is less than 30s, rising to 7½ per cent *ad val* when the price per unit is 40s or over
 LEEWARD ISLANDS (DOMINICA AND MONTserrat) *Ironstone* 20 per cent *ad val*
Molybdenum and other iron-alloy minerals 4s 2d per ton of untreated mineral exported

ASIA

- NORTH BORNEO 5 per cent *ad val*
 CEYLON *Crown lands* A royalty of not less than 5 per cent *ad val* may be levied
Private lands Fixed by negotiation, and vary from one fourth to one tenth of the mineral won
 CYPRUS *Manganese* 5 per cent *ad val* on exports
Chromite 1s 4½ copper piastres* per ton exported
Other ferro-alloy minerals 5 per cent *ad val*

PALESTINE AND TRANS-JORDAN. 2 per cent. of the product or of its equivalent money value at the mine.

INDIA (BRITISH): *Iron ore (for smelting)*. 1 anna and upwards per ton, based on the valuation of imported pig iron.

Other ferro-alloy minerals. $2\frac{1}{2}$ per cent. of the sale value at the pit's mouth, except in the case of Baluchistan and Bombay (see below).

BALUCHISTAN. *Chromite*. 12 annas per ton won and exported.

BOMBAY. *Chromite*. 6 annas per ton.

INDIA (NATIVE STATES):

ALWAR. *Ironstone*. 1 anna per ton.

Cobalt and nickel ores. $7\frac{1}{2}$ per cent. of profits or 5 per cent. of the gross value.

Other ferro-alloy minerals. 5 per cent. of the sale value at the mine.

BHARATPUR. *Ironstone*. 1 anna per ton.

Cobalt and nickel ores. $7\frac{1}{2}$ per cent. of profits or 5 per cent. of the gross value.

Other ferro-alloy minerals. 5 per cent. of the sale value at the mine. Export duty on all ores, Re. 1 per maund.

BONAI. *Manganese ore*. 6 annas per ton.

COCHIN. *Iron ore (for smelting)*. 1 anna per ton upwards, based on the valuation of imported pig iron.

Other ferro-alloy minerals. $2\frac{1}{2}$ per cent. of the sale value at the pit's mouth.

HYDERABAD-DECCAN. *Iron ore*. 1 (Halli Sicca) anna per ton.

Manganese ore. 1 (Halli Sicca) anna per ton.

JAIPUR. *Ironstone*. 1 anna per ton.

Cobalt and nickel ores. $7\frac{1}{2}$ per cent. of profits or 5 per cent. of the gross value.

Other ferro-alloy minerals. 5 per cent. of the sale value at the mine.

JAMMU AND KASHMIR. *Iron ore*. 1 per cent. of the sale value of the dressed ore.

Nickel ore. $2\frac{1}{2}$ per cent. *ad val.*

Other ferro-alloy minerals. 5 per cent. of the sale value.

JODHPUR. *Wolfram*. 25 to 40 rupees per ton, according to the annual output.

KEONJHAR. *Iron ore*. 1 anna upwards per ton.

Manganese ore. 6 annas per ton.

Manganiferous iron ore. 4 annas per ton.

MYSORE. 5 per cent. of the sale value at the mine, convertible at the option of the Government to a fixed charge per ton; minima for latter are fixed.

PUDUKKOTTAI	Ironstone	$\frac{1}{2}$ anna per ton
	Other ferro-alloy minerals	$2\frac{1}{2}$ per cent of the sale value
SANDUR	Iron ore	$\frac{1}{2}$ anna per ton
	Manganese and manganese ore	7 annas per ton
TRAVANCORE	Iron ore	$\frac{1}{2}$ anna per ton
	Other ferro alloy minerals	$2\frac{1}{2}$ per cent <i>ad val</i>

STRAITS SETTLEMENTS 10 per cent of the gross produce of all mines on alienated land for rates on Crown land *see p 127*

FEDERATED MALAY STATES Wolfram or scheelite 2 dollars per pikul (133 $\frac{1}{2}$ lb)

Other ferro alloy minerals 10 per cent *ad val*

TRENGGANU 10 per cent *ad val* (export duty)

JOHORE Wolfram scheelite and other ferro alloy minerals 10 per cent *ad val* export duty

SARAWAK 5 per cent *ad val*

AUSTRALASIA

AUSTRALIA

NEW SOUTH WALES 1 per cent *ad val* no royalty is levied on an annual output which does not exceed £500

SOUTH AUSTRALIA On minerals not alienated from the Crown $2\frac{1}{2}$ per cent of the net profits if obtained from mining leases Alienated minerals pay to the Government 1 per cent of the gross proceeds

TASMANIA 2 to 4 per cent *ad val*

NORTHERN TERRITORY $2\frac{1}{2}$ per cent of the net profits

NEW ZEALAND 1 to 4 per cent *ad val* if obtained under a mineral licence, 5 per cent *ad val* at pit's mouth if from a mineral lease

BASE METALS AND THEIR ORES*

EUROPE

UNITED KINGDOM †	<i>Copper ore</i>	One thirtieth to one twentieth of value
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Lead ore scale One-eighth to one twentieth of value or on a sliding

Tin ore One twentieth to one fortieth of selling price

Zinc ore One thirty fifth of value or on a sliding scale

IRISH FREE STATE † *Copper ore* 2 per cent *ad val*

AFRICA

ANGLO EGYPTIAN SUDAN 2 per cent *ad val* of the average price on
the London market

BECHUANALAND † Copper A sliding scale based on a royalty of 2 per cent when the London price for electrolytic copper is less than £55 per ton

Lead A sliding scale based on a royalty of 2 per cent when the average cash price of lead in London for the month following the date of lead production is less than £20 per ton

Zinc 0.1 per cent for each £1 of the average London cash price of zinc per ton for the month following the date of zinc production

GOLD COAST 5 per cent of the net profits, to Government

NIGERIA Tin 2 to 10 per cent *ad val*, according to the market price of metallic tin Export duty may also be charged

Lead ores or metallic lead with under 4 oz. silver per ton pay 2 per cent *ad val*. When the silver exceeds 4 oz. per ton, an additional royalty of 3 per cent of the value of the silver is levied.

NORTHERN RHODESIA *Metallic copper and zinc* 2 per cent *ad val*
upwards, according to market price of the metal

Lead 1½ per cent *ad val* upwards according to market price of the metal

Ores of lead, copper, and zinc pay upon a sliding scale based on the market price of the metals

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1. The first group of people who are not in the labor force are those who are not in the labor force because they are not in the labor force.

SOMALILAND PROTECTORATE 2 per cent of the product or of its equivalent value at the mine, at the discretion of the Controller of Mines

SOUTHERN RHODESIA *Aluminium, antimony, lead and zinc* 2 per cent of the gross value

Bismuth, cadmium, mercury, copper, tin 3 per cent of the gross value

No royalty is payable on an output which does not exceed £200 in value in any one month

SOUTH WEST AFRICA *Copper, lead zinc* 1 per cent *ad val*

Tin ore 4 per cent *ad val*

SWAZILAND Such amount as will together with any royalty payable under the concession, bring the total royalties up to $2\frac{1}{2}$ per cent of the value of the ore at the mine

TANGANYIKA *Tin* 2 to 10 per cent of the gross sum realized, according to the market price of tin

Other base metals 5 per cent of the gross sum realized

UGANDA *Tin* 2 to 10 per cent of the gross sum realized according to the market price of tin

Other base metals 5 per cent of the gross sum realized

UNION OF SOUTH AFRICA 2s 6d in the £ on profits less allowances

AMERICA

CANADA

NOVA SCOTIA *Copper* 4 cents per ton for each 1 per cent of copper content of the ore

Lead 2 cents per ton for each 1 per cent of lead content of the ore

Zinc 2 cents per ton for each 1 per cent of zinc content of the ore

Tin and other base metals 5 per cent *ad val*

QUEBEC 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions, trebled in case of minerals removed outside the province for treatment

ONTARIO, MANITOBA, SASKATCHEWAN, ALBERTA AND YUKON 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions

BRITISH COLUMBIA (excluding part of Vancouver Island) 2 per cent *ad val* on outputs exceeding \$5,000 in value per annum

NORTHWEST TERRITORIES 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions Minerals obtained by dredging pay $2\frac{1}{2}$ per cent *ad val*

NEWFOUNDLAND (excluding part of Labrador) 5 per cent on profits, less deductions

BASE METALS AND THEIR ORES*

EUROPE

- UNITED KINGDOM † *Copper ore* One thirtieth to one twentieth of value
Lead ore One eighth to one twentieth of value or on a sliding scale
Tin ore One twentieth to one fortieth of selling price
Zinc ore One thirty fifth of value or on a sliding scale
- IRISH FREE STATE † *Copper ore* 2 per cent *ad val*

AFRICA

- ANGLO EGYPTIAN SUDAN 2 per cent *ad val* of the average price on the London market
- BECHUANALAND † *Copper* A sliding scale based on a royalty of 2 per cent when the London price for electrolytic copper is less than £55 per ton
Lead A sliding scale based on a royalty of 2 per cent when the average cash price of lead in London for the month following the date of lead production is less than £20 per ton
Zinc 0.1 per cent for each £1 of the average London cash price of zinc per ton for the month following the date of zinc production
- GOLD COAST 5 per cent of the net profits, to Government
- NIGERIA *Tin* 2 to 10 per cent *ad val*, according to the market price of metallic tin Export duty may also be charged
Lead ores or metallic lead with under 4 oz silver per ton pay 2 per cent *ad val* When the silver exceeds 4 oz per ton, an additional royalty of 3 per cent of the value of the silver is levied
- NORTHERN RHODESIA *Metallic copper and zinc* 2 per cent *ad val* upwards, according to market price of the metal
Lead 1½ per cent *ad val* upwards, according to market price of the metal
Ores of lead, copper, and zinc pay upon a sliding scale based on the market price of the metals

* For details see ...

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SOMALILAND PROTECTORATE 2 per cent of the product or of its equivalent value at the mine, at the discretion of the Controller of Mines

SOUTHERN RHODESIA. *Aluminium, antimony, lead and zinc* 2 per cent of the gross value

Bismuth, cadmium, mercury, copper, tin 3 per cent of the gross value

No royalty is payable on an output which does not exceed £200 in value in any one month

SOUTH WEST AFRICA *Copper, lead, zinc* 1 per cent *ad val*

Tin ore 4 per cent *ad val*

SWAZILAND Such amount as will, together with any royalty payable under the concession, bring the total royalties up to $2\frac{1}{2}$ per cent of the value of the ore at the mine

TANGANYIKA *Tin* 2 to 10 per cent of the gross sum realized, according to the market price of tin

Other base metals 5 per cent of the gross sum realized

UGANDA *Tin* 2 to 10 per cent of the gross sum realized, according to the market price of tin

Other base metals 5 per cent of the gross sum realized

UNION OF SOUTH AFRICA 2s 6d in the £ on profits, less allowances

AMERICA

CANADA

NOVA SCOTIA *Copper* 4 cents per ton for each 1 per cent of copper content of the ore

Lead 2 cents per ton for each 1 per cent of lead content of the ore

Zinc 2 cents per ton for each 1 per cent of zinc content of the ore

Tin and other base metals 5 per cent *ad val*

QUEBEC 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions, trebled in case of minerals removed outside the province for treatment

ONTARIO, MANITOBA, SASKATCHEWAN, ALBERTA AND YUKON 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions

BRITISH COLUMBIA (excluding part of Vancouver Island) 2 per cent *ad val* on outputs exceeding \$5 000 in value per annum

NORTHWEST TERRITORIES 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions Minerals obtained by dredging pay $2\frac{1}{2}$ per cent *ad val*

NEWFOUNDLAND (excluding part of Labrador) 5 per cent on profits, less deductions

- BRITISH GUIANA *Bauxite* 10 cents per ton if won on Crown lands and exported plus $1\frac{1}{2}$ per cent *ad val* export duty, 2 cents per ton if used for manufacture in the colony
- BRITISH HONDURAS *Tin and its ores* 2 to 10 per cent *ad val*, according to London price of tin Ore exported may pay an additional duty of 50 per cent of the maximum royalty on tin
Lead and its ores 2 per cent *ad val* for ore carrying less than 4 oz silver per ton, with an additional 3 per cent of value of silver in excess of 4 oz per ton
- LEEWARD ISLANDS *Copper, tin and lead* 4s 2d per ton of untreated mineral exported

ASIA

- NORTH BORNEO 5 per cent *ad val*
- CEYLON *Crown lands* A royalty not less than 5 per cent *ad val* may be levied
Private lands Fixed by negotiation and vary from one fourth to one tenth of mineral won
- CYPRUS *Cuprififerous pyrites* $4\frac{1}{2}$ copper piastres per ton extracted (9 c p = 1s)
- PALESTINE AND TRANS JORDAN 2 per cent of the product or of its equivalent money value at the mine
- INDIA (BRITISH) $2\frac{1}{2}$ per cent of the sale value of the dressed mineral at the pit's mouth, or an equivalent charge on tonnage at the option of Government
- INDIA (NATIVE STATES)
- ALWAR, BHARATPUR AND JAIPUR *Copper, tin, lead, zinc, aluminium, and mercury ores* $7\frac{1}{2}$ per cent of the profits or 5 per cent of the gross value, at the option of the Local Government
- HYDERABAD DECCAN *Copper, tin, lead or other base metals* $2\frac{1}{2}$ per cent of the gross value
- JAMMU AND KASHMIR *Copper, tin, lead, zinc, bismuth, mercury, aluminium* $2\frac{1}{2}$ per cent of the sale value at the pit's mouth
Other base metals 5 per cent of the sale value at the pit's mouth
- MYSORE 5 per cent of the sale value, convertible at the option of the Government to a fixed charge per ton, minima for the latter are fixed
- PUDUKKOTTAI, COCHIN, TRAVANCORE *Copper, tin, lead and other base metals* $2\frac{1}{2}$ per cent of the sale value at the pit's mouth
- STRAITS SETTLEMENTS 10 per cent of the gross produce of all mines on alienated land

FEDERATED MALAY STATES Tin (smelted) From \$23 upwards per 400 lb, according to the market price of tin

Tin ore 72 per cent of the duty on tin, with an additional duty of \$30 per pikul (133½ lb) if ore is not for smelting in certain Empire countries, plus a further duty of 5 cents per pikul on tin ore exported

Tin slag At the rate for tin ore unless certified otherwise

Other base metals and ores 10 per cent *ad val*

TRENGGANU 10 per cent *ad val* export duty

JOHORE Tin (smelted) \$10 upwards per bhara (400 lb), according to price of tin (export duty)

Tin ore 72 per cent of duty on tin plus \$30 per pikul (133½ lb) for tin ore exported for smelting elsewhere than in the U K, Straits Settlements or Australia

Other base metals and ores 10 per cent *ad val* export duty

SARAWAK 5 per cent *ad val*

AUSTRALASIA

AUSTRALIA

NEW SOUTH WALES 1 per cent *ad val*, no royalty is levied on an annual output which does not exceed £500

SOUTH AUSTRALIA On minerals not alienated from the Crown (if obtained from mining leases) 2½ per cent on the net profits Alienated minerals pay to the Government 1 per cent of the gross proceeds

TASMANIA 2 to 4 per cent *ad val*

NORTHERN TERRITORY Base metal leases pay half yearly 6d in the £ on net profits

NEW ZEALAND 1 to 4 per cent *ad val* if obtained under a mineral licence, if from a mineral lease, 5 per cent *ad val* at the pit's mouth

BRITISH GUIANA *Bauxite* 10 cents per ton if won on Crown lands and exported plus $1\frac{1}{2}$ per cent *ad val* export duty, 2 cents per ton if used for manufacture in the colony

BRITISH HONDURAS *Tin and its ores* 2 to 10 per cent *ad val*, according to London price of tin Ore exported may pay an additional duty of 50 per cent of the maximum royalty on tin
Lead and its ores 2 per cent *ad val* for ore carrying less than 4 oz silver per ton, with an additional 3 per cent of value of silver in excess of 4 oz per ton

LEEWARD ISLANDS *Copper, tin and lead* 4s 2d per ton of untreated mineral exported

ASIA

NORTH BORNEO 5 per cent *ad val*

CEYLON *Crown lands* A royalty not less than 5 per cent *ad val* may be levied

Private lands Fixed by negotiation and vary from one fourth to one tenth of mineral won

CYPRUS *Cupriferous pyrites* $4\frac{1}{2}$ copper piastres per ton extracted (9 c p = 1s)

PALESTINE AND TRANS JORDAN 2 per cent of the product or of its equivalent money value at the mine

INDIA (BRITISH) $2\frac{1}{2}$ per cent of the sale value of the dressed mineral at the pit's mouth, or an equivalent charge on tonnage at the option of Government

INDIA (NATIVE STATES)

ALWAR, BHARATPUR AND JAIPUR *Copper, tin, lead, zinc, aluminium, and mercury ores* $7\frac{1}{2}$ per cent of the profits or 5 per cent of the gross value, at the option of the Local Government

HYDERABAD DECCAN *Copper, tin, lead or other base metals* $2\frac{1}{2}$ per cent of the gross value

JAMMU AND KASHMIR *Copper, tin, lead, zinc, bismuth, mercury, aluminium* $2\frac{1}{2}$ per cent of the sale value at the pit's mouth

Other base metals 5 per cent of the sale value at the pit's mouth

MYSORE 5 per cent of the sale value, convertible at the option of the Government to a fixed charge per ton, minima for the latter are fixed

PUDUKKOTTAI, COCHIN, TRAVANCORE *Copper, tin, lead and other base metals* $2\frac{1}{2}$ per cent of the sale value at the pit's mouth

STRAITS SETTLEMENTS 10 per cent of the gross produce of all mines on alienated land

FEDERATED MALAY STATES *Tin* (smelted) From \$23 upwards per 400 lb, according to the market price of tin

Tin ore 72 per cent of the duty on tin, with an additional duty of \$30 per pikul (133½ lb) if ore is not for smelting in certain Empire countries, plus a further duty of 5 cents per pikul on tin ore exported

Tin slag At the rate for tin ore unless certified otherwise

Other base metals and ores 10 per cent *ad val*

TRENGGANU 10 per cent *ad val* export duty

JOHORE *Tin* (smelted) \$10 upwards per bhara (400 lb), according to price of tin (export duty)

Tin ore 72 per cent of duty on tin plus \$30 per pikul (133½ lb) for tin ore exported for smelting elsewhere than in the U K, Straits Settlements or Australia

Other base metals and ores 10 per cent *ad val* export duty

SARAWAK 5 per cent *ad val*

AUSTRALASIA

AUSTRALIA.

NEW SOUTH WALES 1 per cent *ad val*, no royalty is levied on an annual output which does not exceed £500

SOUTH AUSTRALIA On minerals not alienated from the Crown (if obtained from mining leases), 2½ per cent on the net profits Alienated minerals pay to the Government 1 per cent of the gross proceeds

TASMANIA 2 to 4 per cent *ad val*

NORTHERN TERRITORY *Base metal leases* pay half yearly 6d in the £ on net profits

NEW ZEALAND 1 to 4 per cent *ad val* if obtained under a mineral licence, if from a mineral lease, 5 per cent *ad val* at the pit's mouth

PRECIOUS METALS

EUROPE

- UNITED KINGDOM *Gold and silver* One fiftieth to one twenty fifth of the value of metal raised
- IRISH FREE STATE *Gold and silver* 4 per cent *ad val*

AFRICA

- ANGLO EGYPTIAN SUDAN 2 per cent *ad val* of the average price on the London market
- BECHUANALAND *Gold* * 2 per cent of the monthly output when this exceeds £3,200, plus 0.2 per cent for every dwt of fine gold recovered per ton (2 000 lb) of ore treated, plus a gold premium tax of 15 per cent of the excess value above 85s per oz. If the value of the output is less than £3,200 per month, the royalty is diminished by 1 per cent of its total for every £30 under £3,200
- Silver* 3 per cent *ad val*
- GOLD COAST *Gold* Usually 5 per cent to Government of the net profits plus an export duty of 15 per cent of the gold premium
- KENYA *Gold* 5 per cent of the gross sum realized
- NIGERIA *Gold* On gold of any fineness, 6 per cent of what its value would be if it were pure gold
- Other precious metals* (silver, platinum, iridium, osmium) 5 per cent *ad val*
- NORTHERN RHODESIA *Gold* 2½ to 7½ per cent *ad val*, according to the output and grade of the ore worked. No royalty is payable if the value of the output is less than £200 per month
- Silver* (metallic) 5 per cent *ad val*
- NIASALAND *Gold and silver* Not exceeding 5 per cent of the value of the gross output
- SIERRA LEONE *Gold and silver* 9 per cent of the value of the combined content in crude bullion
- Platinum* 5 per cent *ad val* Crude platinum is assumed to contain 75 per cent of platinum metal, the price of the latter being taken as that of refined platinum on the London market
- SOMALILAND PROTECTORATE *Precious minerals* 4 per cent of the product or of its equivalent value at the mine, at the discretion of the Controller of Mines

* For rates in the Tati District see p. 27

SOUTHERN RHODESIA *Gold and silver* No royalty is payable on precious metals recovered from a block of claims when the total value of the minerals won does not exceed £200 per month. Outputs exceeding £200 per month pay from 2½ to 5 per cent of the gross value realized according to the richness of the ore and the tonnage treated. Certain discoverers may produce free of royalty.

Gold premium tax 15 per cent on the gross value of the premium on all gold won where the output exceeds 600 oz per month. In the case of mines producing between 300 and 600 oz per month the tax is confined to the premium on twice the number of ounces by which the output exceeds 300 oz. Outputs recovered from virgin ore yielding over 2½ dwts but not more than 3½ dwts per ton or from sands and slimes dumps yielding over ½ dwt but not more than 1 dwt per ton obtain a rebate of half the tax. Outputs from virgin ore yielding not more than 2½ dwts per ton or from sands or slimes dumps yielding not more than 1 dwt per ton are given a rebate of the whole tax. Royalty is not payable on the amount of the tax paid. A refund of one sixth of the tax is granted where an amount at least equal to the total tax paid is expended on the development or equipment of a new property.

SOUTH WEST AFRICA *Gold* 10 per cent *ad val*

Silver ore 1 per cent *ad val*

SWAZILAND *Gold* 10 per cent *ad val* in addition to any royalties which may be payable under the concession.

TANGANYIKA *Gold silver and platinum group metals* 5 per cent of the gross sum realized.

UGANDA *Precious metals* 5 per cent of the gross sum realized.

UNION OF SOUTH AFRICA *Gold* 4s in the £ on profits (less allowances) plus a variable gold premium tax (see p 53).

AMERICA

CANADA

NOVA SCOTIA *Gold* 35 cents per oz (see also p 57)

Silver 2 cents per oz. Gold and silver are exempt from royalty until 31st March 1937.

QUEBEC 3 per cent upwards of profits exceeding \$10 000 per annum less deductions. These duties may be trebled in the case of minerals removed outside the province for treatment.

ONTARIO *Gold and silver* 3 per cent

ad val when the output exceeds \$5 000 per annum in value.

NORTHWEST TERRITORIES 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions Minerals obtained by dredging pay $2\frac{1}{2}$ per cent *ad val*

YUKON 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions

Placer gold $2\frac{1}{2}$ per cent of the value of gold exported

NEWFOUNDLAND *Gold, silver and the platinum metals* 5 per cent of the profits, less deductions

BRITISH GUIANA *Gold* 50 cents per oz plus $1\frac{1}{2}$ per cent *ad val*
Silver 4 cents per oz plus $1\frac{1}{2}$ per cent *ad val* export duty

BRITISH HONDURAS *Gold* Not to exceed \$1 per oz
Other precious metals 5 per cent *ad val*

LEEWARD ISLANDS (DOMINICA AND MONTSEERRAT) *Gold and silver* 20 per cent

ASIA

NORTH BORNEO *Precious metals* 5 per cent *ad val*

CEYLON A royalty of not less than 5 per cent may be levied by the Crown in respect of Crown lands

PALESTINE AND TRANS JORDAN *Precious minerals* 5 per cent of the product or of the equivalent money value at the mine

INDIA (BRITISH) *Gold and silver* $7\frac{1}{2}$ per cent of the profits or $2\frac{1}{2}$ per cent of the gross value at the option of the Local Government

INDIA (NATIVE STATES)

ALWAR *Gold and silver* 10 per cent of the profits or 5 per cent of the gross value, at the option of the Government

BHARATPUR, JAIPUR *Gold and silver* 10 per cent of the profits or 5 per cent of the gross value, at the option of the Durbar

COCHIN *Gold and silver* $7\frac{1}{2}$ per cent of the net profits or $2\frac{1}{2}$ per cent of the gross value, at the option of the Local Government

HYDRABAD DECCAN *Gold and silver* 5 per cent of the gross value, less deductions

JAMMU AND KASHMIR *Gold and silver* 5 per cent of the sale value at the pit's mouth, convertible, at the option of the Government, to an equivalent charge on tonnage

MYSORE *Gold and silver* 5 per cent of the gross sale value for those years in which a profit is made, plus a profits tax of 5 per cent of profits exceeding £25 000 per annum

PUDUKKOTTAI *Gold and silver* $7\frac{1}{2}$ per cent of the net profits

TRAVANCORE *Gold and silver* $7\frac{1}{2}$ per cent of the net profits

- STRAITS SETTLEMENTS 10 per cent of the gross produce of all mines on alienated land
- FEDERATED MALAY STATES *Gold* 2½ per cent *ad val* export duty
- TRENGGANU 10 per cent *ad val*
- JOHORE *Gold* 2½ per cent *ad val*
- SARAWAK *Gold* 10 per cent *ad val* on the monthly output from the lease or leases held

AUSTRALASIA

AUSTRALIA

NEW SOUTH WALES 1 per cent *ad val*, no royalty is levied on an annual output which does not exceed £500

QUEENSLAND *Gold* 1 per cent of the value if won from a mineral lease, but no royalty is payable if obtained from a gold mining lease

SOUTH AUSTRALIA On minerals not alienated from the Crown 2½ per cent of the net profits if obtained from mining leases Alienated minerals pay to the Government 1 per cent of the gross proceeds

WESTERN AUSTRALIA *Gold* No royalty on gold won from gold mining lease 1s per fine oz is levied on gold found in association with other minerals in land held under mineral lease or recovered by sluicing or dredging

TASMANIA 2 to 4 per cent *ad val*

NORTHERN TERRITORY *Gold and mineral leases* pay 2½ per cent of the net profits An additional royalty of 1 per cent is payable on gold obtained with any other mineral under a mineral lease

NEW GUINEA *Gold and platinum metals* 5 per cent *ad val*

PAPUA *Gold* 1s per oz (1 oz = gold valued at Royal Mint at £3 17s 10½d) When found combined or associated with other mineral on mineral lease for minerals other than gold 1 per cent of the value

FIJI *Gold* 5 per cent of the value in Fiji currency

Silver 1 per cent of the value in Fiji currency

NEW ZEALAND *Gold* No royalty levied if obtained from a claim, but an export duty is charged varying from 12s 6d to 15s per oz

PRECIOUS STONES

AFRICA

- ANGLO EGYPTIAN SUDAN *Precious and semi precious stones* 10 per cent of the sale price
- BECHUANALAND *Diamonds* 10 per cent *ad val* on diamonds won and sold, plus one half of the profit from working any diamond pipe
- GOLD COAST *Diamonds* Export duty of $6\frac{1}{2}$ per cent *ad val*, plus 5 per cent of the net profits
- NIASALAND *Diamonds* A royalty may be levied not exceeding 10 per cent of the value of the gross output
- SIERRA LEONE *Diamonds* $27\frac{1}{2}$ per cent of the ascertained profits
- SOMALILAND PROTECTORATE 4 per cent of the product or of its equivalent value at the mine, at the discretion of the Controller of Mines
- SOUTH WEST AFRICA *Diamonds* 60 per cent of the proceeds (less 70 per cent of the approved working costs) plus 10 per cent export duty
Semi precious stones 2 per cent *ad val*
- SWAZILAND Such amount as will bring the total royalties payable up to $2\frac{1}{2}$ per cent of the value of the stones at the mine
- TANGANYIKA 10 per cent of the gross value
- UGANDA 10 per cent of the gross value
- UNION OF SOUTH AFRICA *Diamonds* 3s in the £ on the profits plus an export duty of 10 per cent *ad val* on uncut precious stones, plus a share of the profits (*see p 52*)

AMERICA

CANADA

- NOVA SCOTIA 5 per cent *ad val* or a royalty on profits
- QUEBEC 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions, trebled in the case of minerals removed outside the province for treatment
- ONTARIO MANITOBA, SASKATCHEWAN AND ALBERTA 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions
- BRITISH COLUMBIA 2 per cent *ad val*

NORTHWEST TERRITORIES 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions Minerals obtained by dredging pay $2\frac{1}{2}$ per cent *ad val*

NEWFOUNDLAND 5 per cent on profits, less deductions

BRITISH GUIANA 50 cents per carat plus 35 cents per carat export duty

Bort and rubbish 15 cents per carat, plus 5 cents per carat export duty

LEEWARD ISLANDS (DOMINICA AND MONTSERRAT) 30 per cent of the net profits

ASIA

CEYLON 5 per cent *ad val* may be levied by the Crown in respect of Crown lands

PALESTINE AND TRANS JORDAN 5 per cent of the product or of the equivalent money value at the mine

INDIA (BRITISH) When obtained from mining leases, 30 per cent of the net profits, unless otherwise provided, as in the case of Ajmer Merwara and Burma (see below)

AJMER MERWARA *Beryl* 12 per cent of the sale value at pit's mouth

BURMA *Jadestone* $33\frac{1}{3}$ per cent *ad val*

Amber 5 per cent *ad val*

INDIA (NATIVE STATES)

ALWAR Not to exceed 50 per cent of the net profits or 25 per cent of the gross value at the option of the Local Government

BANGANAPALLE *Diamonds* 30 per cent of the sale value

BHARATPUR *Beryl and garnet* 30 per cent of the net profits or 15 per cent of the gross value

Emerald 50 per cent of the net profits or 25 per cent of the gross value

Aquamarine 40 per cent of the net profits or 20 per cent of the gross value

Rock crystal (bilaur) 20 per cent of the net profits or $12\frac{1}{2}$ per cent of the gross value

Other precious stones Not to exceed 50 per cent of the net profits

HYDERABAD DECCAN Not exceeding 30 per cent of the value

JAIPUR *Beryl and garnet* 30 per cent of the net profits or 15 per cent of the gross value

Emerald 50 per cent of the net profits or 25 per cent of the gross value

- NIGERIA** *Mica* 5 per cent of the local average value as assessed by the Chief Inspector of Mines
- NYASALAND** *Mica* 10 per cent of the sale price
Plumbago 5 per cent of the sale price
Asbestos 5 per cent of the sale price
- SIERRA LEONE** *Ilmenite* 1s per ton
- SOMALILAND PROTECTORATE** *Minerals* (except mineral oil, natural gas, peat, precious metals and precious stones) 2 per cent of product or of the equivalent value thereof at the mine
- SOUTHERN RHODESIA** *Asbestos, barium, diatomite, graphite, gypsum, magnesite, mica, pyrites, sulphur, lime and strontium* 2 per cent of the gross value
Arsenic, beryllium, cadmium, fluorspar, lithium, ochres, phosphate, potash salts, selenium, soapstone, talc, thorium, titanium, zirconium and umber 3 per cent of the gross value
 No royalty is payable if the value of the output does not exceed £200 in any one month
Other minerals (except coal, petroleum, natural gas, iron ore, cobalt, manganese, molybdenum, nickel, tungsten, chromite, aluminium, antimony, lead, zinc, bismuth, copper, tin, mercury, uranium, gold, and silver) 5 per cent of the gross value
- SOUTH WEST AFRICA** *Beryllium ore* 2 per cent
Lithium ore 2 per cent
Titanium ore 1 per cent
Tantalum ore 1 per cent
Fluorspar 1 per cent
Phosphates 5 per cent
Salt 2 per cent
Other minerals (except ores of tungsten, vanadium, copper, lead, zinc, tin, gold and silver, diamonds, and semi precious stones) are free of royalty
- TANGANYIKA** *Stone or gravel* 1s per 100 cu ft
Clay or sand 50 cents per 100 cu ft
Salt 6s per ton
Other minerals (except precious metals, precious stones, tin and coal) 5 per cent of gross sum realized, except mica waste under 0.002 in thick, which is free of royalty
- UGANDA** *Non precious minerals* (except coal, tin, clay, limestone, murram, chalk, building stones or mineral oil) 5 per cent of the gross sum realized
- UNION OF SOUTH AFRICA** *Minerals* (except gold and diamonds) 2s 6d in the £ on profits

AMERICA

CANADA

NOVA SCOTIA *Minerals* (except coal, ores of iron, copper, lead, tin, zinc, gold and silver, precious stones, limestone, gypsum and building material) 5 per cent *ad val* or a tax of 3 per cent upwards on profits exceeding \$10,000 per annum, less deductions

NEW BRUNSWICK Royalty may be levied except on carbonate and sulphate of lime and gypsum

QUEBEC *Asbestos* 3 per cent tax on annual profits up to \$500,000, 5 per cent on the excess up to \$1,000,000, and 8 per cent on the excess above

Other minerals 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions, trebled in the case of minerals removed outside the Province for treatment

ONTARIO AND MANITOBA 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions

SASKATCHEWAN *Sodium sulphate* 12½ cents per ton (2,000 lb) or 12½ per cent of the sales value of the crude product

Slate, marble, gypsum, clays, and quarry products Not yet fixed

Other minerals (except the above and peat, coal, bitumen, petroleum, natural gas, and oil shale) 3 per cent upwards on profits exceeding \$10,000 per annum, less deductions

ALBERTA *Sodium sulphate* 12½ cents per ton (2,000 lb) or 12½ per cent of the sales value of crude product

Slate, marble, gypsum, clays, and quarry products Not yet fixed

Other minerals (except those above and peat, coal, bitumen, petroleum, natural gas, and oil shale) 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions

BRITISH COLUMBIA (excluding part of Vancouver Island)
Phosphate rock 10 cents per ton (2,000 lb)

Other minerals (except coal, coke, petroleum, iron ore, gold, silver, platinum, limestone, clay, building stones, and natural gas) 2 per cent of gross value when the latter exceeds \$5,000 per annum

NORTHWEST TERRITORIES *Alkali* 25 cents per ton (2,000 lb) or 12½ per cent of the selling price If sold in solution, 2 cents per gall

Polash Not to exceed 2½ per cent of sales value

Other minerals (except peat, coal, petroleum, natural gas, bitumen, and oil shales) 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions

- NIGERIA *Mica* 5 per cent of the local average value as assessed by the Chief Inspector of Mines
- NYASALAND *Mica* 10 per cent of the sale price
Plumbago 5 per cent of the sale price
Asbestos 5 per cent of the sale price
- SIERRA LEONE *Ilmenite* 1s per ton
- SOMALILAND PROTECTORATE *Minerals* (except mineral oil, natural gas, peat, precious metals and precious stones) 2 per cent of product or of the equivalent value thereof at the mine
- SOUTHERN RHODESIA *Asbestos, barium, diatomite, graphite, gypsum, magnesite, mica, pyrites, sulphur, lime and strontium* 2 per cent of the gross value
Arsenic, beryllium, cadmium, fluorspar, lithium, ochres, phosphate, potash salts, selenium, soapstone, talc, thorium, titanium, zirconium and umber 3 per cent of the gross value
 No royalty is payable if the value of the output does not exceed £200 in any one month
Other minerals (except coal, petroleum, natural gas, iron ore, cobalt, manganese, molybdenum, nickel, tungsten, chromite, aluminium, antimony, lead, zinc bismuth, copper, tin, mercury, uranium gold, and silver) 5 per cent of the gross value
- SOUTH WEST AFRICA *Beryllium ore* 2 per cent
Lithium ore 2 per cent
Titanium ore 1 per cent
Tantalum ore 1 per cent
Fluorspar 1 per cent
Phosphates 5 per cent
Salt 2 per cent
Other minerals (except ores of tungsten, vanadium, copper, lead, zinc, tin, gold and silver, diamonds, and semi precious stones) are free of royalty
- TANGANYIKA *Stone or gravel* 1s per 100 cu ft
Clay or sand 50 cents per 100 cu ft
Salt 6s per ton
Other minerals (except precious metals, precious stones, tin and coal) 5 per cent of gross sum realized, except mica waste under 0 002 in thick, which is free of royalty
- UGANDA *Non precious minerals* (except coal, tin, clay, limestone, murrum, chalk, building stones or mineral oil) 5 per cent of the gross sum realized
- UNION OF SOUTH AFRICA *Minerals* (except gold and diamonds) 2s 6d in the £ on profits

AMERICA

CANADA

NOVA SCOTIA *Minerals* (except coal ores of iron, copper, lead, tin, zinc, gold and silver, precious stones, limestone, gypsum and building material) 5 per cent *ad val* or a tax of 3 per cent upwards on profits exceeding \$10 000 per annum, less deductions

NEW BRUNSWICK Royalty may be levied except on carbonate and sulphate of lime and gypsum

QUEBEC *Asbestos* 3 per cent tax on annual profits up to \$500 000, 5 per cent on the excess up to \$1,000 000, and 8 per cent on the excess above

Other minerals 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions trebled in the case of minerals removed outside the Province for treatment

ONTARIO AND MANITOBA 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions

SASKATCHEWAN *Sodium sulphate* 12½ cents per ton (2,000 lb) or 12½ per cent of the sales value of the crude product

Slate, marble, gypsum, clays, and quarry products Not yet fixed

Other minerals (except the above and peat, coal, bitumen, petroleum, natural gas and oil shale) 3 per cent upwards on profits exceeding \$10,000 per annum, less deductions

ALBERTA *Sodium sulphate* 12½ cents per ton (2,000 lb) or 12½ per cent of the sales value of crude product

Slate, marble, gypsum, clays, and quarry products Not yet fixed

Other minerals (except those above and peat, coal, bitumen, petroleum, natural gas, and oil shale) 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions

BRITISH COLUMBIA (excluding part of Vancouver Island) *Phosphate rock* 10 cents per ton (2,000 lb)

Other minerals (except coal, coke, petroleum, iron ore, gold, silver, platinum, limestone, clay, building stones, and natural gas) 2 per cent of gross value when the latter exceeds \$5,000 per annum

NORTHWEST TERRITORIES *Alkali* 25 cents per ton (2,000 lb) or 12½ per cent of the selling price If sold in solution, 2 cents per gall

Potash Not to exceed 2½ per cent of sales value

Other minerals (except peat, coal, petroleum, natural gas, bitumen, and oil shales) 3 per cent upwards of profits exceeding \$10,000 per annum, less deductions

YUKON *Alkali* 25 cents per ton (2,000 lb) or $12\frac{1}{2}$ per cent of selling price

Potash Not to exceed $2\frac{1}{2}$ per cent of sales value

Other minerals (except peat, coal, petroleum, natural gas, bitumen, and oil shales) 3 per cent of the profits exceeding \$10,000 per annum, less deductions

NEWFOUNDLAND (excluding part of Labrador) *Arsenic, barium, boron, bromine, iodine, magnesium, phosphorus, graphite, potash, soda, strontium, sulphur, asbestos, emery, mica, and mineral pigments* 5 per cent of profits, less deductions

Limestone, marble, clay, and building stones are exempt from this tax

BRITISH HONDURAS *Mica* 5 per cent of the local average value as assessed by the Inspector of Mines

TRINIDAD *Asphalt* Crude 2s 6d, dried 3s 6d per ton, plus export duties of 5s and 6s 11d per ton respectively

ASIA

NORTH BORNEO 5 per cent *ad val* on minerals excluding coal, mineral oil and precious stones

CEYLON *Crown lands* A royalty of not less than 5 per cent *ad val* may be levied

Private lands Fixed by negotiation and vary from one fourth to one tenth of mineral won

CYPRUS *Asbestos* 5 per cent *ad val* on exports

Gypsum 3 copper piastres per ton exported

Magnesite 5 per cent *ad val* on exports

Limestone $4\frac{1}{2}$ copper piastres per ton exported

Terra umbra 3s $4\frac{1}{2}$ copper piastres per ton exported

Stone (sawn or dressed) $4\frac{1}{2}$ copper piastres per ton exported

Other minerals (except chromite and cupriferous pyrites) 5 per cent *ad val* on exports

PALESTINE AND TRANS JORDAN *Non precious minerals* (except petroleum and natural gas) 2 per cent of product or of equivalent money value at the mine

INDIA (BRITISH) * *Mica* 5 per cent of the sale value at the pit's mouth

Other minerals (except coal, coal dust, natural gas, petroleum, oil shale iron ore, gold and silver, and precious stones) $2\frac{1}{2}$ per cent of sale value of dressed mineral at the pit's mouth, or an equivalent charge on tonnage at the option of the Local Government

* For local deviations see p 181

AJMER-MERWARA. *Mica, felspar, china-clay, beryl (not gem), soapstone, asbestos, and greenstone.* 2½ per cent. of the sale value at the pit's mouth.

ASSAM. *Limestone.* 2 rupees per 100 quarry maunds (5 tons).

BENGAL. *Limestone.* 3 annas 3 pies to 6 annas 6 pies per ton, according to situation of deposit in relation to transport.

BIHAR AND ORISSA. *Limestone.* From 4 annas 10 pies to 9 annas 9 pies per ton, according to the situation of the deposit in relation to transport.

Mica. 5 per cent. *ad val* or a combined rent and royalty of 1 rupee 8 annas per acre leased

CENTRAL PROVINCES AND BHRAR *Mica.* 5 per cent. of sale value, latter assessed on size and quality.

Ochre, soapstone, marble, slate and building stone 2½ per cent. *ad val.* at the pit's mouth.

Limestone 4 annas per 100 maunds (approx 1d per ton)

MADRAS *Mica* 5 per cent of the sale value at the pit's mouth.

NORTHWEST FRONTIER PROVINCE *Marble* 8 annas per 100 cu ft in the rough

Limestone 5 annas per 100 maunds (approx 1½d per ton)

INDIA (NATIVE STATES).

ALWAR *Mica* 10 per cent of the sale value

Soapstone. Not to exceed 6 annas per maund (approx 1½s per ton)

Other minerals (except petroleum, ironstone, cobalt and nickel ores, copper, tin, lead, zinc, aluminium, and mercury ores, gold, silver, and precious stones) 5 per cent of the sale value at the pit's mouth.

BHARATPUR AND JAIPUR *Mica* 10 per cent of the sale value at the pit's mouth

Soapstone Not to exceed 6 annas per maund

Abrasive garnet 7½ per cent of the sale value at the pit's mouth

Other minerals (except coal, ironstone, precious stones, copper, tin, lead, zinc, cobalt, nickel, aluminium and mercury). 5 per cent of the gross value

BIKANER *Fuller's earth* Rs 7 per ton

Gypsum 3 pies per ton

COCHIN *Minerals* (except coal, petroleum, natural gas, iron ore, gold, silver, precious stones and mica) 2½ per cent of the sale value at the pit's mouth

HYDERABAD-DECCAN *Mica* 2½ per cent of the gross value

China clay 1 Halli Sica rupee per ton

Marble 2 Halli Sica rupees per ton

China clay 1 Halli Sica rupee per ton

Marble 2 Halli Sica rupees per ton

Graphite 2½ per cent of the gross value

Steatite 2½ per cent of the gross value

Corundum and garnet (industrial) 10 per cent of the gross value

Other minerals (except coal, petroleum, iron ore, manganese ore, copper, tin lead and precious stones) 5 per cent of gross value

JAISALMER *Gypsum, fuller's earth and ochre* 1 anna per 4 maunds or 7 annas per ton

JAMMU AND KASHMIR *Mica* 2½ per cent of the sale value at the pit's mouth

China clay (crude) 1 rupee per ton

China clay (washed) 2 rupees per ton

Ochres 1 anna per cwt

Steatite 1 rupee 4 annas per ton

Other metals and ores (except coal petroleum, natural gas, gold, silver, ironstone, nickel, copper, tin lead, zinc, bismuth, mercury, aluminium and precious stones) 5 per cent of the sale value at the pit's mouth

JODHPUR *Limestone* 6 pies per maund

Gypsum 3 to 6 pies per maund according to annual output

Sandstone 2 pies per maund (approx 5d per ton)

Selenite 9 pies per maund (approx 1s 10d per ton)

Marble (chips or ballast) 1 anna per maund (approx 2s 6d per ton)

Fuller's earth 102 to 126 rupees per wagon

Kankar 1 pie per maund

KEONJHAR *Dolomite* 2 annas 6 pies per ton

KHARSWAN *Kyanite* 1 rupee per ton when the price, in London, of the raw mineral is £3 or under per ton, increasing by 1 anna per ton for each 4s by which the price exceeds £3 per ton

MEWAR *Mica* 7½ per cent *ad val* plus export duty

Soapstone 3 annas 6 pies per maund (approx 7s 10d per ton)

Talc Rs 2 per ton

MISORF *Magnesite, china clay limestone, soapstone quartz, felspar, kyanite staurolite, and garnet* 5 per cent of the sale value at the mine, subject to certain minimum charges

Other minerals (except chrome, manganese, and precious stones) 5 per cent of the sale value at the pit's mouth

RRWA *Limestone* 1 anna to 2 annas 6 pies per ton

TRAVANCOR *Monazite* 40 rupees (British India) per ton of monazite extracted if the market selling price varies between £20 and £25 per ton

Ilmenite 1 rupee (British India) per ton extracted if the selling price is between £2 and £3 10s per ton

Zircon 7½ rupees (British India) per ton extracted if the selling price is between £8 and £10 per ton

- STRAITS SETTLEMENTS** 10 per cent of gross produce of all mines (other than laterite) on alienated land
 On Crown land rates are as follows
Laterite (Singapore) 5 cents per cu yd
Laterite (Malacca) 1 cent per cu ft
Granite (Singapore) Rubble, 4 cents per cu yd, squares 5 cents per cu ft, dressed 6 cents per cu ft
Granite (Malacca) Rubble, 2 cents per cu ft, squares 5 cents per cu ft, dressed, 6 cents per cu ft
- FEDERATED MALAY STATES** *China clay felspar, and china stone* 2½ per cent *ad val*
Other metals and metalliferous ores (except scheelite wolfram tin, tin ore tin slag, and gold) 10 per cent *ad val*
- JOHORE *** *China clay* 5 per cent *ad val*
Other metals and metalliferous ores (except tin, tin and tungsten ores, and gold) 10 per cent *ad val*
- SARAWAK** 5 per cent *ad val*

AUSIRALASIA

AUSTRALIA

- NEW SOUTH WALES** 1 per cent *ad val* no royalty on an annual output which does not exceed £500
- VICTORIA** *Sand* 6d per cu yd
Tailings Mine refuse 1d to 2s 6d per cu yd removed
- SOUTH AUSTRALIA** On minerals not alienated from the Crown, 2½ per cent on net profits if obtained from mining leases. Alienated minerals pay to the Government 1 per cent of the gross proceeds
- TASMANIA** 2 to 4 per cent *ad val*
- NORTHERN TERRITORY** *Mineral leases* pay half yearly 6d in the £ sterling on the profits
- NEW GUINEA** *Sulphur* Export duty 1s per ton on sulphur or substances exported for extraction of sulphur therefrom
- NEW ZEALAND** If obtained under a mineral licence 1 to 4 per cent of the value at the mine, if obtained from a mineral lease 5 per cent of the value at the pit's mouth

* Includes duties

IMPERIAL INSTITUTE

PUBLICATIONS ON MINERAL RESOURCES

The following is a list of the Official Publications (all prices are net, and those in parentheses include postage) to be obtained from the Imperial Institute, London, S W 7

REPORTS ON THE MINERAL INDUSTRY OF THE BRITISH EMPIRE AND FOREIGN COUNTRIES		
Abrasives	(1929)	Price 2s 6d (2s 8d)
Aluminium and Bauxite	(1921)	" 9d (11d)
Antimony	(1921)	" 1s 0d (1s 2d)
Arsenic	(1920)	" 6d (7d)
Asbestos	(1921)	" 1s 0d (1s 2d)
Barium Minerals	(1921)	" 9d (11d)
Beryllium and Beryl	(1931)	" 6d (7d)
Bismuth	(1920)	" 6d (7d)
Borates	(1933)	" 9d (10d)
Bromine	(1928)	" 6d (7d)
Cadmium	(1929)	" 9d (10d)
China Clay (Kaolin)	(1931)	" 1s 6d (1s 8d)
Chrome Ore and Chromium	(1920)	" 1s 0d (1s 2d)
Coal, Coke and By Products		
Part I	(1921)	" 3s 6d (3s 9d)
Part II	(1922)	" 6s 6d (7s 1d)
Part III	(1922)	" 7s 0d (7s 7d)
Cobalt	(1921)	" 9d (11d)
Copper	(1922)	" 4s 0d (4s 4d)
Diatomaceous Earth	(1928)	" 1s 0d (1s 1d)
Felspar	(1920)	" 6d (7d)
Fluorspar	(1921)	" 9d (11d)
Fuller's Earth	(1920)	" 6d (7d)
Gemstones (out of print)	(1933)	" 2s 6d (2s 8d)
Gold	(1922)	" 6s 0d (6s 6d)
Graphite	(1923)	" 1s 6d (1s 7d)
Gypsum	(1923)	" 9d (10d)
Iron Ore Resources of the World		
Part I United Kingdom	(1922)	" 6s 0d (6s 5d)
Part II British Africa	(1922)	" 3s 0d (3s 3d)
Part III British America	(1922)	" 3s 6d (3s 10d)
Part IV British India	(1922)	" 2s 6d (2s 9d)
Part V British China	(1922)	" 4s 0d (4s 4d)
Part VI British Japan	(1922)	" 6s 0d (6s 6d)
Part VII British Persia	(1922)	" 4s 0d (4s 5d)
Part VIII British Russia	(1922)	" 2s 6d (2s 10d)
Iodine	(1928)	" 6d (7d)
Lead	(1933)	" 4s 0d (4s 3d)
Lead Poisoning Laws and Regulations	(1922)	" 5s 0d (5s 5d)
Lithium	(1933)	" 6d (7d)
Magnesite	(1920)	" 1s 3d (1s 5d)
Manganese	(1921)	" 3s 6d (3s 9d)
Nica	(1921)	" 9d (11d)
Molybdenum	(1923)	" 1s 6d (1s 8d)
Monazite	(1920)	" 6d (7d)
Nickel	(1922)	" 1s 6d (1s 8d)
Nitrates	(1920)	" 9d (11d)
Petroleum	(1923)	" 6s 6d (6s 8d)
Phosphates	(1921)	" 2s 0d (2s 2d)
Platinum and Allied Metals (in the press)	(1936)	" 3s 6d (3s 4d)
Quicksilver	(1922)	" 1s 0d (1s 2d)
Salt	(1927)	" 2s 0d (2s 2d)
Silver	(1923)	" 4s 0d (4s 3d)
Strontium Minerals	(1923)	" 7d (3d)
Sulphur and Iron Pyrites	(1922)	" 1s 6d (1s 8d)
Talc	(1921)	" 9d (11d)
Tantalum and Niobium	(1930)	" 6d (7d)
Tin	(1922)	" 3s 0d (3s 2d)
Tungsten	(1921)	" 1s 0d (1s 2d)
Vanadium	(1922)	" 6d (7d)
Zinc	(1930)	" 3s 0d (3s 3d)

Continued on next page

IMPERIAL INSTITUTE

PUBLICATIONS ON MINERAL RESOURCES

(Continued from p 184)

MONOGRAPHS ON MINERAL RESOURCES Tin Ores, 3s 6d Tungsten Ores, 3s 6d Petroleum, 5s Oil Shales, 5s Mercury Ores, 5s Molybdenum Ores, 5s Coal, 6s Silver Ores, 6s Chromium Ores, 3s 6d Potash, 6s Copper Ores, 7s 6d Nickel Ores, 5s Cobalt Ores, 3s 6d Vanadium Ores, 5s Bismuth Ores, 3s 6d Antimony Ores, 5s Bauxite and Aluminium, 6s

SUMMARY STATISTICS OF THE MINERAL INDUSTRY OF THE BRITISH EMPIRE AND FOREIGN COUNTRIES 1913 1920, 3s, 1920 1922, 8s, 1921 1923, 8s, 1922 1924, 8s, 1923 1925, 8s, 1924 1926, 8s, 1925 1927, 8s, 1926 1928, 7s 6d, 1927 1929, 5s 6d, 1928 1930, 5s 6d, 1929 1931, 6s 1930 1932, 6s 6d, 1931 1933, 6s (out of print), 1932 1934, 7s 6d

THE MINING LAWS OF THE BRITISH EMPIRE AND OF FOREIGN COUNTRIES

Volume I	Nigeria	(1920)	Price 15s 0d (15s 7d)
Volume II	West Africa (The Gold Coast, Ashanti, The Northern Territories, and Sierra Leone)	(1920)	, 15s 0d (15s 7d)
Volume III	Part I The Transvaal	(1922)	, 10s 0d (10s 8d)
Volume III	Part II Swaziland	(1921)	10s 0d (10s 4d)
Volume III	Part III Orange Free State	(1920)	7s 6d (7s 10d)
Volume IV	Part I British Columbia	(1922)	21s 0d (21s 7d)
Volume IV	Part II Ontario, Canada	(1924)	27s 6d (27s 11d)
Volume IV	Part III Dominion of Canada	(1920)	17s 0d (18s 6d)
Volume V	Part I New South Wales		
	Australia	(1920)	21s 0d (21s 6d)
Volume V	Part II Victoria Australia	(1921)	12s 6d (13s 0d)
Volume VI	British India	(1921)	15s 0d (15s 9d)
Volume VII	Federated Malay States	(1921)	12s 0d (12s 6d)
Volume VIII	Part I East Africa (Tanganika Kenya Nyasaland Zanzibar)	(1927)	, 12s 6d (12s 11d)
Volume IX	British Guiana	(1927)	10s 6d (10s 10d)
Volume X	New Zealand	(1911)	10s 0d (10s 6d)
Volume XI	Newfoundland	(1910)	5s 0d (5s 3d)
Volume XII	Northern Rhodesia	(1929)	10s 6d (10s 10d)

Mining Royalties and Rents in the British Empire (1936) , 3s 6d (3s 11d)

Survey of the Mineral Position of the British Empire (1931) , 2s 0d (2s 2d)

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